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Graeco-Roman Influence on the Civilization of Ancient India.—By VINCENT
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Section I. INTRODUCTION.

When the wearied veterans of "the great Emathian conqueror", laden with plunder and sated with conquest, refused to cross the Hyphasis and to try the fortune of war in the valley of the Ganges, the exclusive, conservative East won a victory over the intruding, progressive West, which must have appeared to the actors on the scene as final and decisive.

But it was neither final nor decisive, for, though the obstacles opposed by hostile man and nature could stop the onward march of the Macedonian phalanx, nothing could arrest the sure and world-wide progress of the ideas and culture, which constituted the real strength of Hellas and were but rudely expressed by the disciplined array of Alexander's armies.

India has not willingly sought the treasures of foreign wisdom, and, guarded by her encircling seas and mountains, she has tried, throughout the long course of ages, to work out her own salvation. She has tried, but has not succeeded. Again and again, both before and after Alexander, the barriers have been broken through, and her children, who would

fain believe that all light comes from the east, have been compelled to admit the rays of the western sun.

In the dim mist of prehistoric ages we can discern faint indications that India, in common with all regions of Asiatic and European civilization, drew supplies from those stores of Egyptian, Assyrian and Babylonian antique lore, which were, so far as we know or probably ever can know, the ultimate sources of the knowledge which distinguishes civilized man from the savage.

The history of those long past times is lost, and, save perhaps in some faintly sketched and dubious outlines, can never be recovered.

The Indian expedition of Alexander the Great in B. C. 327—326 was, so far as our definite knowledge extends, the first occasion of close, conscious contact between East and West. The arms of the conqueror, it is true, subdued no more than a mere corner of India, and that only for a moment, but the Hellenic culture, to the diffusion of which Alexander devoted attention, as great as that bestowed by him on his material conquests, long survived his transitory empire in Asia, and, even in secluded India, made its presence felt in many and different directions.

I shall not attempt to penetrate the thick darkness which conceals the relations between India and the western world in the ages before Alexander, but propose to consider the kind and degree of post-Alexandrian influence on the ancient civilization of India, and to invite my readers' attention to an obscure and little known chapter in the ever-interesting history of Greek ideas.

The working of these ideas on Indian soil, although discernible in the fields of religion, poetry, science and philosophy, is most obvious in the domain of architecture and plastic art, and I shall devote the greater part of this essay to the consideration of Indo-Hellenic architecture and sculpture.

No Indian example in stone either of architecture or sculpture, earlier than the reign of *Aśoka* (*circa* B. C. 260—223), has yet been discovered, and the well-known theory of Mr. Fergusson, that the sudden introduction of the use of stone instead of wood for the purposes both of architecture and sculpture in India was the result of communication between the empire of Alexander and his successors, and that of the Mauryan dynasty of Chandra Gupta and *Aśoka*, is, in my opinion, certainly correct. The change from wood to stone indubitably took place, and no other explanation has ever been suggested.

I shall not, however, now discuss Mr. Fergusson's theory, but shall proceed to examine particular cases of undoubted and incontestable Hellenistic, including Roman, influence on the Indian development of the arts of architecture and sculpture.

A brief discussion of the more prominent effects of the contact between the Græco-Roman and Indian civilizations on other departments of human activity in India will follow, and will enable the reader to form a conception as a whole of the impression made by the West upon the East during a period of seven or eight centuries. That impression was not sufficiently deep to stamp Indian art, literature and science with an obviously European character, although it was much deeper than is commonly supposed.

Section II. INDO-HELLENIC ARCHITECTURE.

The style of architecture, appropriately named Indo-Persian by Sir Alexander Cunningham, and obviously derived from that employed in the Achæmenian palaces of Susa and Persepolis, was extensively used throughout Northern and Western India for several centuries both before and after the Christian era. With this style of western, though not Hellenic, origin the history of Indian architecture begins. It would be more strictly accurate to say that with this style the history of Indian architectural decoration begins, for no buildings in it exist, and we know its character only from pillars and miniature representations in sculptured reliefs.

The pillars are characterized by "a bell-shaped lower capital, surmounted by an upper member formed of recumbent animals, back to back."* The series of examples in Northern India, of pillars more or less fully corresponding to this definition, begins with the monoliths of Aśoka (circa B. C. 250), and ends with the pillar of Budha Gupta at Eraṇ in the Sâgar District of the Central Provinces, which bears an inscription dated in the year A. D. 435.† The caves of Western India offer examples apparently rather later, and specimens of intermediate dates have been found at Bhârhit, Buddha Gayâ, Sânci, Beṣṣâ, and Mathurâ, as well as in the Gândhâra or Yûsnfzai country. But there is no evidence as yet forthcoming that Indo-Persian pillars were used structurally in Gândhâra. In miniature, as architectural decorations, they were a favourite ornament in that region.

The Indo-Persian pillar underwent gradual modifications in India Proper, with which I am not at present concerned. On the north-west frontier of India, that is to say, in the western districts of the Panjâb, in the valley of the Kâbul River, including Gândhâra or the Yûsnfzai country, and in Kâshmîr, it was supplanted by pillars imitated from

* Cunningham, *Archæol. Rep.*, Vol. V, p. 185. [For a convenient synopsis of specimen pillars of the Persian, Indo-Persian, Indo-Hellenic (Corinthian) and Indo-Doric styles, see *ibid.*, Plates XXVII, and XLV to L. Ed.]

† All the Gupta dates are determined in Mr. Fleet's work on the Gupta Inscriptions, *Corpus Inscript. Indicarum*, Vol. III.

Greek models. Isolated examples of Indo-Hellenic pillars probably existed in other regions also, associated with the specimens of Hellenized sculpture which occur at Mathurá and some other localities remote from the Panjáb frontier, but, as yet, none such have been discovered, and, speaking generally, the Hydaspes or Jhelam river may be assigned as the eastern boundary of Indo-Hellenic architectural forms.

The evidence does not, to my mind, warrant the use of the term "Indo-Grecian styles of architecture," which is employed by Sir A. Cunningham. So far as I can perceive, the published plans of Indian buildings show no distinct traces of Greek ideas, and there is no evidence of the employment of the characteristic Greek pediment or entablatures. The known facts prove only that the Indians used, in buildings planned after their own fashion, pillars copied, with modifications, from Greek prototypes.

In the outlying province of Káshmir and the dependent region of the Salt Range a modified form of the Doric pillar was employed. The earliest example of the use of this form is found in the temple of the sun at Mártaṇḍ, which was erected not earlier than A. D. 400, and perhaps should be dated two or three centuries later. Temples in a style similar to that of Mártaṇḍ appear to have continued to be erected in Káshmir down to the time of the Muhammadan conquest of the valley. They are characterized by trefoiled arches, and pyramidal roofs, and were frequently, if not always, built in the centre of shallow tanks. These peculiarities are in no wise Greek. The pillars undoubtedly, as Sir A. Cunningham observes, resemble the Grecian Doric in "the great ovolo of the capital, and in the hollow flutes of the shaft." It is difficult to believe that the agreement in these respects between the Greek and Indian work is accidental, but it is also difficult to imagine the existence of a channel through which the Kashmirians borrowed the Doric form of pillar at a time when every other manifestation of Hellenic ideas had already disappeared, or was on the point of disappearing, from India.

I cannot venture to deny the Greek origin of the semi-Doric pillars of the temples in Káshmir, although I am not satisfied that it is fully established. Even if it be admitted, the admission is hardly sufficient to warrant the assertion that the Kashmirian buildings are examples of an Indo-Doric style. The most that can be correctly affirmed is, that these buildings contain pillars which may fairly be described as Indo-Doric. These Indo-Doric pillars, if there be indeed anything Doric about them, are never associated with Indo-Hellenic sculpture, or anything else which gives the slightest indication of Greek influence. The Káshmir style stands apart, and the study of it throws little light either on the history of Indian architecture, or on that of the diffusion of Greek ideas. I shall, therefore, exclude it from consideration, and

refer readers who may care for further information on the subject to the discussion of it by Mr. Fergusson and Sir A. Cunningham, and to the fine series of plates prepared under the supervision of Major Cole.*

But, whether the pillars of the Káshmir temples be really derived from Doric prototypes or not, there is no doubt whatever that pillars, the designs of which are modifications of the Ionic and Corinthian types, were common on the north-west frontier of India during the early centuries of the Christian era.

These Greek architectural forms have as yet been found only in a very limited area, which may be conveniently referred to under the name of Gándhára.†

The boundaries of the kingdom of Gándhára, as it existed in ancient times, are known with approximate accuracy. Hiuen Tsiang, who travelled between A. D. 629 and 645, describes the kingdom as extending about 166 miles (1000 li) from east to west, and 133 miles (800 li) from north to south, with the Indus as its eastern boundary: The great city of Purushapura, now known as Pesháwar, was then the capital.‡ The earlier Chinese traveller, Fa Hian (A. D. 400—405), assigns the same position to the kingdom of Gándhára, though he describes its boundaries with less particularity.§

The region referred to by both Chinese pilgrims may be described in general terms as the lower valley of the Kábul river. It is very nearly identical with the territory to the north-east of Pesháwar, now inhabited by the Afghán clan, known as the Yúsufzai or Sons of Joseph, which comprises the independent hilly districts of Swát and Buhner, as well as the plain bounded on the east by the Indus, on the north by the hills, and on the south and west respectively by the Kábul and Swát rivers. This plain, which is attached to the Pesháwar District, and administered by British officers, corresponds to the tract known to the Greeks as Peukeloaitis (Sanskrit *Pushkaláwati*), the capital of which occupied the site of the modern Hashtnagar, eighteen miles north of Pesháwar.||

* Major Cole's book is entitled *Illustrations of Ancient Buildings in Káshmir*, (London, India Museum, 1869). His plates are good, but his remarks on the dates of the buildings illustrated would have been better omitted. Mr. Fergusson discusses the style in his *History of Indian and Eastern Architecture*. Sir A. Cunningham described it in the *Journal, Asiatic Society, Bengal*, for 1848, and recurs to the subject in *Archæol. Reps.*, Vol. V, pp. 84-90, Plates XXVI, XXVII; Vol. XIV, p. 35, Pl. XV.

† Sanskrit authority warrants either a long or short vowel in the first syllable of the name.

‡ Beal, *Buddhist Records of the Western World*, Vol. I, p. 97.

§ Fa Hian, *Travels*, Chapter X, in either Beal's or Leggo's translation.

|| Cunningham, *Archæol. Rep.*, Vol. V, p. 1. Hashtnagar is described *ibid.*, Vol. II, p. 90, and Vol. XIX, pp. 96—110.

Strictly speaking, therefore, the name Gándhára is applicable only to a small territory west of the Indus.

But the great city of Taxila, (Takkhasilá, or Takshasilá, the modern Sháh kí Dherí), situated three marches, or about thirty miles, east of the Indus, was undoubtedly, in the time of Alexander the Great, the chief city on the north-western frontier of India, and must have been then, as it subsequently was in the reigns of Ásoka and Kanishka, included in the dominions of the government which ruled Gándhára. Kanishka is expressly called the king of Gándhára.*

The vast Buddhist religious establishments at Máuikyála, about thirty miles south-east of Taxila, belonged to the same jurisdiction, and at both places remains are found of that Indo-Hellenic school of art, which attained its chief development in Gándhára west of the Indus. The name of Gándhára, as indicating an artistic and architectural province, may, therefore, be extended, as it was by Mr. Fergusson, so as to comprise the modern districts of Pesháwar and Ráwalpindí, including Taxila and Mánikyála, as far east as the Hydaspes or Jhelam river. When speaking of the art of Gándhára I must be understood as employing the name in its wider sense.

The upper valley of the Kábul river was full of Buddhist buildings, many of which have been explored by Masson and others, and was included in the dominions of Kanishka and his successors. But, so far as the published accounts show, this region was only slightly affected by Hellenic influences, and it must, for the present at all events, be considered as outside the artistic province of Gándhára.

The Gándhára territory, the situation of which has thus been defined, was the principal seat of Hellenic culture in India, and from one or other part of it nearly all the known examples of Indo-Hellenic art in its most characteristic forms have been obtained. Traces of Greek and Roman teaching may be detected in the remains at many localities in northern and western India, but nowhere with such distinctness as in the lower valley of the Kábul river. The Gándhára school of art obviously deserves, though it has not yet obtained, a place in the general history of Greek architecture and sculpture, and this cannot be said of the other early Indian schools.

At Bhárhut, Sánchi, Buddha Gayá, Ajañtá, and Amarávatí proofs may be given that the local style of art was modified by contact with

* A full account of the ruins of Taxila will be found in Cunningham, *Archæol. Rep.*, Vol. II, pp. 112, *seqq.*; Vol. V, pp. 66, *seqq.*, and Vol. XIV, pp. 9, *seqq.* Fa Hian states that Dharma Vardhana (or Vivardhana, as Dr. Leggo writes the name), son of Ásoka, ruled in Gándhára, and, according to another legend, the stúpa in memory of Ásoka's son Kunála was situated south-east of Taxila, (Cunningham, *Archæol. Rep.*, Vol. II, p. 149.)

that of the western world, but the evidence does not lie upon the surface. In the remains of the buildings and sculptures of Gándhára the merest tyro can perceive at a glance that the style of art is in the main Greek or Roman, not Indian.*

* The principal referances to published notices of the Gándhára school of art are as follows ;—

(1) *Notes on some sculptures found in the District of Pesháwar.* By E. C. Bayley. With several rnde lithographs. (*Journal As. Soc., Bengal*, Vol. XXI (1852), pp. 606—621). The sculptures described in this paper were collected at Jamálgharí by Messrs. Lumsden and Stokes, and were destroyed by the fire at the Crystal Palace.

(2) *Indian Antiquary*, (Bombay), Vol. III, pp. 143, 159.

(3) *History of Indian and Eastern Architecture.* By James Fergusson.

(4) *Reports of the Archaeological Survey of India, Vol. V.* By Sir A. Cunningham. Volume II of the same series gives information concerning Taxila. See also Vol. XIV, p. 31, Pl. XIV.

(5) *Descriptive List of the Principal Buddhist Sculptures in the Lahore Museum*, p. 11. This list, kindly supplied to me by the Curator, contains brief particulars of 95 specimens, of which 32 are marked with an asterisk, as being either "in exceptionally good preservation, or interesting from their subjects." The list is signed by Sir A. Cunningham, but is not dated. Two specimens are noted as coming from Sahri Bahlol, and one is stated to have been obtained in the fortress of Rápnigat, but no other indication is given of the localities from which the sculptures were obtained.

I have not been able to procure a "*Memorandum by Mr. Baden-Powell on the sculptures in the Lahore Museum*," which is referred to by Sir A. Cunningham, *Archæol. Rep.*, Vol. V, p. 55, note 1.

(6) *Catalogue and Handbook of the Archaeological Collections in the Indian Museum.* By John Anderson, M. D., F. R. S., &c. Part I, Calcutta, 1883. 201 Indo-Hellenic objects are described, viz., 177 arranged under the heading Gándhára, 18 under Posháwar, two under Mathurá, and one each under Hazára, Kábul, miscellaneous, and Bihár.

(7) *Memorandum on Ancient Monuments in Eusufzai (sic).* By Major Cole; being part of the Second Report of the Curator of Ancient Monuments in India, pp. CXIV, *seqq.* This document was separately reprinted at the Government Central Branch Press, Simla, 1883. It is illustrated by rough lithographic plates, comprising all the subjects subsequently treated by the heliogravure process, as well as by a map of the Yásufzai country, and eleven other plans and sketches.

(8) *Preservation of National Monuments, India, Græco-Buddhist Sculptures from Yásufzai.* By Major H. H. Cole, R. E. Published by order of the Governor-General in Council for the office of Curator of Ancient Monuments in India. Large folio, p. 7, with 30 very fine heliogravure plates, 1885.

(9) *The Buddhist Stúpas of Amarávatí and Jaggayapeta.* By James Burgess, C. I. E., &c., Archaeological Survey of Southern India. Trübner, London, 1887. This work does not describe the sculptures, but some good specimens of them are figured in woodcuts Nos. 1, 4, 11, 14, 21, 23, 24, and 26, which are copied from the illustrated edition of Sir E. Arnold's *Light of Asia*.

(10) *Alt- und Neu-Indische Kunstgegenstände aus Professor Leitners jüngster*

No indication of a knowledge of the Doric order of architecture can be detected in the remains of the buildings of Gándhára. With two exceptions, the only Greek architectural form used is a modification of the Corinthian pillar and pilaster.

The two exceptions both occur to the east of the Indus, outside the limits of Gándhára proper.

On the site of Taxila Sir A. Cunningham disinterred the remains of a Buddhist temple, the portico of which was supported on four massive sandstone pillars of the Ionic order. Similar, though smaller, pillars were found in the interior of the building. No part of the larger pillars were discovered, except their bases. The mouldings of these bases are said to correspond exactly with those of the pure Attic base, as seen in the Erechtheum at Athens, the only difference being the greater projection of the fillet below the upper torus in the Indian example.

Portions of the shafts and capitals of the smaller pillars were found. The shafts are circular in section and plain. The capitals were made of nodular limestone, and appear to have been plastered and gilded. They agree generally in form with Greek, not Roman, models, but are ruder and more primitive in style, and are specially distinguished from all

Sammlung, ausgestellt in K. K. Österr. Museum für Kunst und Industrie, Stubenring 5. Verlag des K. K. Österr. Museum's Wien, 1883.

The specimens of the Gándhára school of art preserved in museums are very numerous. The principal collection is that in the Lahore Museum. It is very extensive, numbering many hundred objects, but seems to be badly arranged. I have not seen it. The collection next in importance is that in the Indian Museum, Calcutta. Dr. Anderson's carefully compiled Catalogue gives a good idea of its contents. Major Cole intended to send spare specimens to the museums at Bombay, Madras, and some other places, which were, I suppose, sent.

In London the best collection, though not an extensive one, is that which occupies cases Nos 1-7 in the Asiatic Saloon of the British Museum. The South Kensington collection is officially described as comprising 24 sculptures in stone, and 49 plaster casts from originals in the Lahore Museum, presented by Sir R. Egerton in 1882. When I examined the specimens in 1888, they were exhibited partly in a glass case, partly on a detached screen, and the rest on a wall screen. Dr. Leitner's collection at Woking comprises some original sculptures and a considerable number of casts from the works in the Lahore Museum. It is described in the printed Catalogue above cited.

The Museum at Vienna contains some specimens presented by Dr. Leitner, and many examples of the work of the school are believed to exist in private hands both in Europe and India. Sir A. Cunningham possesses a valuable series of photographs of the more remarkable sculptures. Mr. Kipling, Curator of the Lahore Museum, informs me that he intends to arrange for the publication of a set of photographs of Indo-Hellenic art. The specimens in the possession of Mr. L. White King, B. C. S. will be noticed subsequently.

known Greek examples by the excessive weight and height of the abacus.*

The employment of stucco to conceal the roughness of the limestone and to facilitate the execution of the moulding reminds us of the temple of Fortuna Virilis at Rome, where the same expedient was used to complete the decorative work on Ionic capitals made of rugged travertine.†

Sir A. Cunningham subsequently discovered among the ruins of Taxila in another temple the bases and portions of the drums of two Ionic pillars, differing slightly in detail from those above described.‡

These two buildings are the only known examples of the use of the Ionic form of pillar in India.

The rude style of the capitals in the building first discovered—the only ones yet found—might suggest the fancy that the Taxilan temples preserve specimens of the primitive Ionic order in its Asiatic form, before it was developed by Greek skill. But the evidence of the comparatively late date of the temple adorned by these rude capitals is too clear to allow indulgence in such a notion. The building cannot, apparently, be earlier than B. C. 20 or 30, the approximate date of king Azes, twelve of whose coins were lifted out by Sir A. Cunningham with his own hand from their undisturbed resting place below the floor of the sanctum, and under the corner of a platform which had supported a number of plaster Buddhist statues.§ The date of the temple may therefore be assigned roughly to the beginning of the Christian era, at which time, it need not be said, the Ionic order had long been fully developed. The question of date will be considered more fully in a later section.

The Taxilan temples with Ionic pillars were, like all the known examples of Indo-Hellenic architecture, dedicated to the service of the Buddhist religion. Sir A. Cunningham gives a plan of the one first discovered, from which it appears that the whole edifice was 91 feet long by 64 feet broad, standing on a platform, which projected about 15 feet beyond the walls on all sides except the east, forming a terrace adorned with plaster statues. It is supposed that this terrace was roofed in as a cloister. The entrance was on the east, in the centre of one of the larger sides, through a portico supported on four Ionic columns. This portico led into an entrance hall, 39½ feet long from north to south, by 15¼ feet broad from east to west. The sanctum or cella of the temple lay behind this, with a length of 79 feet from north to south,

* Cunningham, *Archæol. Rep.*, Vol. II, p. 129; Vol. V, pp. 69, 190.

† Burn, *Roman Literature and Art*, p. 204.

‡ Cunningham, *Archæol. Rep.*, Vol. XIV, p. 2, Pl. VII.

§ Cunningham, *ibid.*, Vol. V, pp. 72, 190.

and a breadth of $23\frac{1}{2}$ feet from east to west. This room, except at the wide doorway, was surrounded by a bench 4 feet $8\frac{1}{2}$ inches broad, and 2 feet high, which supported plaster statues of Buddha, with his hands either resting on his lap or raised in the attitude of teaching. It is remarkable that the hair of these figures was rendered by the conventional curls, which are so commonly associated in later times with Buddhist and Jain art. Unluckily no drawings or photographs of these plaster figures have been published, and it is impossible to say whether they were coeval with the Ionic pillars or not. I should not have expected to find plaster statues at the beginning of the Christian era, and I suspect that the images are of considerably later date than the pillars.

Sir A. Cunningham believes that the roof was constructed mainly of wood, and that the chambers were lighted by windows in the upper part of the walls, which projected above the roof of the surrounding cloister. He conjectures that the four portico pillars "must have been intended to support a vaulted roof presenting a pointed arch gable to the front, as in the smaller chapels across the Indus." A small room, 20 feet $1\frac{1}{2}$ inch long by $15\frac{3}{4}$ feet broad, communicated with each end of the entrance hall.

The reader will not fail to observe that the plan and elevation of this temple have little in common with those of Greek temples.

I agree with Sir A. Cunningham and Mr. Fergusson in regarding the buildings with Ionic pillars at Taxila as the oldest architectural remains yet discovered in the Gándhára province, and I shall subsequently attempt to show that a considerable interval separates them from the numerous edifices characterized by a lavish use of Corinthian pillars and pilasters.

The fact that the Corinthian pillars and pilasters were used, much in the same way as they are in many modern European buildings, for decorative purposes applied to buildings of native design, and not as members of an "order" in the technical sense, is clearly proved by the manner in which Indo-Persian and Indo-Corinthian forms are employed together. No styles can be more diverse than these, and yet the Gándhára architects felt no scruples about employing them both in the one building, or even in the one sculpture. The first plate in Major Cole's set of beautiful heliogravures affords a good illustration of this purely decorative use of two diverse styles. The subject of the plate is an alto-relievo of the seated Buddha embellished by numerous minor figures and architectural decorations. The latter chiefly consist of combinations of Indo-Persian pillars with plain "Buddhist railings" and ogee-shaped façades, while the pilasters at the lower corners of the slab have acanthus leaf capitals in the Indo-Corinthian style. This sculpture was probably executed in the third century A. D.

Although there is no reason to suppose that the Gándhára buildings adorned with Corinthian pillars were Greek or Roman in plan or elevation, the remains excavated, especially those at Jamálgarhí, prove that such pillars, both circular and square in section, were used for structural support, as well as for sculptural decoration.

No piece of Corinthian shaft has yet been discovered. The testimony of the sculptures is not conclusive, but, so far as we can judge from the miniature pillars and pilasters in the reliefs, the shafts were plain, not fluted.

The incomplete lower parts of the bases of two structural pillars have been found, and a comparison of their dimensions with those of the pillars in the famous choragic monument of Lysicrates at Athens (B. C. 334) has satisfied Sir A. Cunningham that the Indian examples differ from the Greek standard "solely in giving an inward slope to the perpendicular narrow fillet which separates the scotia and torus.

"In both the Indian examples it will also be observed that the torus, or round projecting moulding, is thickly foliated, like that of most of the Corinthian bases. Of the upper part of the base not even a fragment has yet been found; and the representations in the bas-reliefs do not offer any assistance, as they show only one large and one small torus, separated by an astragal, and altogether want the deeply marked scotia which forms the leading characteristic of the Corinthian base, and which is carefully preserved in both of the full-sized Indian specimens."

The foliation referred to is not found on the bases of the pillars of the monument of Lysicrates, and is, I think, purely Roman decoration. I shall subsequently give reasons for dating the Gándhára pillars between A. D. 250 and 350, and for holding that all the Indian buildings adorned with Corinthian pillars were constructed under the influence of Roman art. The remains of structural Indo-Corinthian capitals, found chiefly at Jamálgarhí and Takht-i-Bahí, are numerous, but unfortunately are never perfect, owing to the brittleness of the clay slate in which they were carved, and to the practice of constructing each capital from many pieces bound together by iron cramps. The lower portion of the larger capitals, some of which measure about three feet in diameter, was made in from two to four pieces; the upper portion always consisted of four segments.

The British Museum possesses some fine examples of these capitals collected by Sir A. Cunningham at Jamálgarhí, and smaller specimens may be seen in the collection at South Kensington. Others are preserved in the Indian Museum, Calcutta, and in the Lahore Museum.*

* Plates XLVII—L of Cunningham's *Archæol. Rep.*, Vol. V, are devoted to the illustration of Indo-Corinthian pillars. The restoration of elephants on the top of a

Sir A. Cunningham, who was unwilling to recognize Roman influence on the art of Gáundhára, compares the Indo-Corinthian capitals with those of "the pure Corinthian order of Greece" as follows:—

"The chief points of similarity are:—

1st. The three rows of acanthus leaves, eight in each row, which are arranged round the drum or bell of the capital.

2nd. The broad, but not deep, volutes at the four corners.

3rd. The four pointed abacus with a curved recess in the middle of each side.

The most marked points of difference are the following:—

1st. The wide spread of the abacus, which is equal to $2\frac{1}{2}$ heights of the whole capital, that of the Greek examples being little more than $1\frac{1}{2}$ height.

2nd. The retention of the points at the four corners of the abacus, which in all the Greek examples have been cut off.

3rd. The insertion of a fourth row of acanthus leaves which is projected forward to the line joining the horns of the abacus. The abacus is thus formed from a square having a curved recess on each side of the central projection.

4th. The placing of flowers on the abacus which are supported on twisted stems springing from the roots of the volutes. In a single instance fabulous animals are added to the flowers on the horns of the abacus.

5th. The insertion of human figures amongst the acanthus leaves, whose overhanging tufts form canopies for the figures."

I have quoted this passage in full, not because I attach much value to the comparison made in it, but because it gives an authoritative description of the characteristic features of the Indo-Corinthian capitals. Sir A. Cunningham cannot help admitting the resemblance between those specimens which exhibit human figures among the foliage and Roman capitals found in the ruins of the baths of Caracalla, but avoids the natural conclusion, and boldly declares that, if the design for these capitals with human figures was suggested by any earlier works, "the suggestion must have come from the creative Greeks of Ariana, and not from the imitative Romans."* On the other hand, I am fully convinced, as I shall try presently to prove, that the design in question did come "from the imitative Romans," and that the art of Gáundhára is essen-

capital shown in Pl. XLVIII is conjectural, and not supported by adequate evidence. Two of the Jamálgarhi capitals are figured in Fergusson's *History of Indian and Eastern Architecture*, and a rough sketch of one specimen from the same place is given in *Indian Antiquary*, Vol. III, p. 142.

* Cunningham, *Archæol. Rep.*, Vol. V, pp. 192—194.

tially Roman in style. The Jamálgarhí carvings date, I believe, from about the middle of the third century A. D., and can be usefully compared in detail only with the similar work in contemporary, or nearly contemporary, Roman buildings. It is waste of trouble to make elaborate comparison of their details with those of the monument of Lysicrates, which was erected about six hundred years previously, but I am not sufficiently acquainted with the minutiae of architectural criticism to pursue the subject further, and must leave to others the task of accurately verifying the various differences and resemblances between the Indo-Corinthian and Romano-Corinthian styles. Probably, however, the task would not justify the labour bestowed upon it. If the Roman origin of the Indo-Corinthian style be admitted, very minute study of variations in detail may be deemed superfluous, great variation in the embellishment of Corinthian capitals being everywhere allowed and practised.

Section III.

THE GÁNDHÁRA OR PESHÁWAR SCHOOL OF SCULPTURE DESCRIBED.

A specimen of sculpture, apparently Indo-Hellenic in style, and closely related to the work of the Gándhára school, was discovered at Kábul in 1833,* but the first distinct announcement of the existence of a school of Hellenic art in India was made in 1836 by James Prinsep, the founder of scientific Indian archaeology, who published in that year at Calcutta a description, illustrated by rude plates, of the so-called Silenus group procured by Colonel Stacy at Mathurá. This group, though undoubtedly Indo-Hellenic in style, is not the work of the Gándhára school. It will be discussed in the next following section.

The ruins of the monastery at Jamálgarhí, north-east of Pesháwar, were discovered by Sir A. Cunningham in 1848, but he did not publish any account of his discovery till many years later.

The first published account of the Gándhára sculptures is that written by the late Sir E. C. Bayley, who printed in the Journal of the Asiatic Society of Bengal for the year 1852 an account, illustrated by

* *Journal Asiatic Society of Bengal*, Vol. III, p. 362, Pl. XXVI, fig. 1; Anderson's *Catalogue*, Part I, p. 261 (K. 1). The sculpture is circular, 15½ inches in diameter, and represents the seated meditating Buddha with flames proceeding from his shoulders, and surrounded by subordinate figures. It was discovered in November, 1833, in ruins two miles south-east of the city of Kábul, enclosed in a large and beautifully roofed square masonry cell, "handsomely gilt, and coloured by lapis lazuli, which is found in considerable quantities in the mines of Badakshán, twelve days' journey from Kábul." Lapis lazuli has also been found on the site of Taxila, and at Baoti Pind in the Ráwalpindí District. (Cunningham, *Archæol. Rep.*, Vol. II, pp. 117, 141).

the roughest possible sketches, of some remarkable sculptures found at Jamálgarhí. The works, thus imperfectly illustrated, were subsequently brought to England, and exhibited in the Crystal Palace, where they were destroyed by the disastrous fire which also consumed Major Gill's copies of the paintings on the walls and ceilings of the Ajañta caves.

Prinsep's and Bayley's description of the works of Indo-Greek sculptors failed to attract general attention, probably owing to the extreme rudeness of the illustrative plates. Dr. Leitner, who brought to Europe in 1870 a considerable collection of works of art, to which he gave the name of Græco-Buddhist, is entitled to the credit of being the first to interest the learned world in the existence of a school of Indo-Hellenic architecture and sculpture.

Though the Greek influence on the style of the works exhibited by Dr. Leitner, and on the many similar objects since discovered, is now universally admitted, it is remarkable that, so late as the year 1875, at least one writer of repute denied its existence.

"It has become a fashion recently," wrote the late Mr. W. Vaux, F. R. S., "to extend a Greek influence to districts east of Bactria, for which I venture to think there is really but little evidence. Thus, we are told that certain Buddhistic figures, chiefly in slate, procured by Dr. Leitner and others to the north-east of Pesháwar, exhibit on them manifest traces of Greek art. I am sorry to say that I cannot perceive anything of the kind."*

The Greek influence on the Gándhára sculptures, which Mr. Vaux could not perceive, is so obvious to other critics, that a formal refutation of his ill-founded scepticism would now be superfluous. Professor Curtius has rightly observed that the discoveries of Dr. Leitner, Sir A. Cunningham, and other explorers in the Kábul valley, "open a new page in the history of Greek art."†

The new page thus opened has as yet been little read, and I venture to hope that the following description of a few of the most noteworthy examples of Indo-Hellenic art, and discussion of the sources from which it was derived, may attract both classical and Oriental scholars to the further exploration of a field hitherto very imperfectly worked.

The present section will be devoted to the description of some of the more remarkable and characteristic specimens of the work of the

* *Nismatic Chronicle*, Vol XV, N. S., p. 12, note.

† *Abhandlung über die Griechische Kunst*, as quoted in Dr. Leitner's Catalogue. I believe the paper was published in the *Archæologische Zeitung* for 1875, but I have not seen it.

very prolific sculptors belonging to the Gándhára school. The chronology and artistic relations of the school will be separately discussed in a subsequent section; at present I shall refer only very briefly to these topics.

The oldest known example of Indo-Hellenic sculpture in the Panjáb probably is the statuette in purely Greek style of Pallas Athéné, the original of which is in the Lahore Museum. Dr. Leitner has a good cast of this work in his museum at Woking, and Sir A. Cunningham possesses a photograph of it. It is shown in Plate VII.

The attitude of the goddess is that represented on certain coins of Azes, which show her helmeted, standing, facing front, crowning herself with her right hand, and holding in her left hand a spear obliquely across her body. The goddess of the coins carries a shield also on her left arm, but the statuette is imperfect, and the shield has been lost.*

The close relation of this sculpture to the coins of Azes proves that it must be approximately contemporary with that prince, that is to say, that it dates from the beginning of the Christian era, or possibly a few years earlier. It therefore belongs to the same period as do the Ionic pillars of the Taxilan temples. The statuette is said to have been found somewhere in the Yúsufzai country, but the exact locality where it was discovered does not seem to be known.

I shall explain subsequently my reasons for thinking that this statuette of Pallas is a relic of Indo-Hellenic sculpture properly so called, as distinguished from the Indo-Roman school to which all, or almost all, the other examples of Gándhára art belong.

The effigy of the virgin goddess of Athens cannot be certainly connected with any Indian religious system, and we cannot say whether the statuette above described formed part of the decoration of a Buddhist temple or not. But in all probability it did, for every specimen of Indo-Hellenic sculpture from Gándhára, the find-spot of which is known, belonged to a Buddhist building of one sort or another.

Most of the sculptures are evidently Buddhist in subject, but some of them, notably the figures supposed to represent kings, deal with secular subjects, though used to decorate edifices consecrated to the service of religion.

* Gardner, *Catalogue of Coins of Greek Kings of Bactria and India*, Plate XVIII, 4. Cunningham, in his *Descriptive List* (No. 21), observes, "The lower right arm, which probably bore the ægis with the head of Medusa, has been lost." This remark is evidently erroneous. The goddess on the coins carries, as might be expected, the shield on her left arm, and grasps the spear with her left hand. Her right arm is raised, with the hand to her head, as for the purpose of crowning herself.

Dr. Leitner and Sir A. Cunningham both consider that the most striking piece in the extensive collection at the Lahore Museum is the figure of a throned king, resting his left foot on a footstool, and grasping a spear in his left hand. See Plate VIII. The upper part of the body is naked, the head-dress is rich, and the squarely cut eyes are remarkably prominent. The work is in good preservation, the right arm alone being wanting. The king's attitude is easy, his expression is dignified, and the outlines of his figure are boldly drawn. Small figures, which have been conjectured to represent conquered aborigines, are attached to the right and left. The identity of the attitude of the principal figure of this fine group with the attitude of the Indo-Scythian kings as shown on their coins naturally suggests that the sculpture represents one of these sovereigns. I do not know where the sculpture was found.*

Sir A. Cunningham found at Jamálgarhí fifteen or sixteen statues, some seated, and some standing, which he supposes to be those of kings, and observes that "these royal statues are known by their moustaches, and the numerous strings of gems worked into their head-dresses. The arrangement of the hair is different in each separate specimen, and, as the features also differ, there seems little doubt that they are portrait statues."†

In the case of one statue in the Lahore Museum, (No 6 of Descriptive List, and No. 63 of Dr. Leitner's Catalogue), which Professor Curtius compares with the Greek ideal type of Apollo, the royal character of the person portrayed is unmistakably indicated by the presence of the regal fillet, the ends of which float loosely behind his head, in the same way as they are shown on the coins of Greek princes both of Europe and Asia.

It is hardly possible that all these so-called royal statues can be intended as ideal representations of Buddha as Prince Siddhártha, before he adopted the religious life, though some of them probably should be so interpreted. Mr. Fergusson suggested that they should be regarded as images of Buddhist saints, and the presence of the nimbus behind the head in many cases supports this suggestion.‡

The presence or absence of moustaches proves nothing, for Buādhā is frequently represented as wearing moustaches in the works of the Gándhāra school. If the images in question were portrait statues, as suggested by Sir A. Cunningham, they would probably be inscribed. It seems hardly credible that sculptors would execute numerous portraits of Kanishka and other kings without taking the trouble of indi-

* Cunningham, *Descriptive List*, No. 2; Leitner, *Catalogue*, No. 73.

† Cunningham, *Archæol. Rep.*, Vol. V, pp. 197, 202.

‡ *History of Indian and Eastern Architecture*, p. 179.

eating for whom the portraits were intended. I think it more likely that these so-called royal figures are not portraits of individuals, but that they are ideal representations, in some cases of kings, and in some cases of saints.

The museums in London and Calcutta possess several examples of sculptures of this class. Two from the upper monastery at Nuttu are depicted in Major Cole's heliogravure plates Nos. 24 and 25. The statue or statuette shown in the latter plate represents a man of dwarfish figure, standing, as if preaching, with a nimbus behind his head. The legs are thick and badly executed, and the work seems to me to be of comparatively late date, probably subsequent to A. D. 300. This figure, in spite of the ornaments and moustaches, appears intended to represent a preaching saint rather than a king.

The works above described were all, so far as is known, associated with Buddhist buildings, though in themselves not obviously Buddhist in subject. I shall now proceed to describe sculptures, the subjects of which are taken from the rich stores of Buddhist mythology.

The birth-scene of Gautama, or Prince Siddhártha, who in after days won the honourable title of the Buddha, or the Enlightened, is a favourite subject with Buddhist artists, and recurs in their works almost as frequently as representations of the Nativity are met with in Christian art.

Sir A. Cunningham, in the catalogue of sculptures excavated, chiefly at Jamálgarhí, under his supervision, enumerates four examples of this favourite subject, two of which are now in the Indian Museum, (*G. 1 and 2*).* See Plate IX, fig. 1. Major Cole gives a plate of a tolerably well-preserved specimen discovered at the upper monastery of Nuttu during subsequent explorations in the Yásufzai country.†

According to Buddhist belief, Mâyá Deví, the Buddhist Madonna, was standing under a *sál* tree, when she gave birth to the holy infant, who sprang from her right side, and was received in a golden net by Brahmá, attended by the *devas*, or angels. This legend appears to be, like the sculptures which express it, descended from a Greek original. Mr. Beal has pointed out that, in several respects, it closely resembles the Greek myth of the birth of Apollo in Delos.‡

The details of the scene vary considerably in different sculptures, but the traditional grouping of the principal figures is never materially changed. The description of one specimen will, therefore, suffice for all.

* Dr. Anderson's *Catalogue*, Part I, pp. 199, 202.

† Seven examples of sculptures of the nativity of Buddha preserved in the Lahore Museum are enumerated in Cunningham's *Descriptive List*, which, as usual, gives no indication of the localities where they were discovered.

‡ *Indian Antiquary*, Vol. IX, p. 68.

On the slab photographed by Major Cole (Plate 11) Mâyá is shown, standing, facing the spectator, with her head slightly inclined, and the weight of her body thrown on the right foot. Her left leg is crossed in front, with the toes resting lightly on the ground. In her right hand she grasps a branch of the over-shadowing tree, and her left arm is thrown round the neck of her half-sister Prajápati, who supports her. The figure of the sister is turned in a singularly awkward posture, so as to show most of her back.* The infant Buddha, springing with outstretched arms from his mother's side, is recognizable, though much mutilated; the figure of Brahmá is almost completely destroyed. The other attendants, who are introduced in some examples, are here wanting. A harp in the upper corner of the composition indicates the heavenly music which heralded the advent of him whose mission it was to still the discords of millions of human hearts.

In this work the pose of Mâyá is tolerably graceful, her figure is free from the usual Indian exaggeration, and her expression, in conformity with the belief that the Buddha cost his mother none of the pangs of travail, is perfectly calm. Her hair is richly braided, and arranged in the form of a crown or tiara.

A very finely executed statuette of Mâyá Devi, standing alone, which was obtained at the same monastery, (*Cole, Plate 15, figure 2*), shows her in nearly the same attitude as in the birth scene, holding above her head the branch of a conventional tree, more or less resembling a palm.

The drapery of this figure is specially elegant. The principal garment is a tunic (*chiton*) reaching to the knees, and confined at the waist, by a rich girdle of four strings, adorned with clasp and vine-leaf pendant. A scarf is thrown lightly over the shoulders, and the legs are clad in loosely fitting trousers of thin material. The dress of Mâyá in the nativity group is simpler, and consists of an inner tunic or vest, and a robe wound gracefully round the body, and looped up at the waist.

Single figures like that above described are not uncommon. The slight variations in different examples indicate that they were arranged in pairs.†

Religious artists found in the deathbed of Buddha a subject scarcely less fascinating than the scene of his birth.‡

* See *post*, for a parallel from the Catacombs.

† So, at Cave XX, Ajantá. "Cave XX is a small Vihára with two pillars and two pilasters in front of the verandah. One pillar is broken, but on each side of the capitals there is a pretty statuette of a female under a canopy of foliage." (Burgoss, *Notes on the Buddhist Rock-Temples of Ajantá, being No. 9, Archæol. Survey of W. India, Bombay, 1879*). This valuable book is out of print.

‡ The *Descriptive List* mentions only one example of this subject in the Lahore Museum, but the collection there probably includes other specimens. The Indian

According to the Buddhist scriptures, he passed away at the age of eighty, surrounded by his chief disciples, shaded by the *sál* trees in a grove at a place called Kusinagara, which has been fully identified as the modern Kasiá in the Gorakhpur District of the North-Western Provinces.*

All representations of the scene agree in showing the master lying on his right side, in a posture of perfect repose, with his head resting on his hand. The number of attendants varies in different sculptures. Plates Nos. 16 and 22 of Major Cole's volume give illustrations of two well-preserved reliefs, obtained respectively at the upper and lower monasteries of Nuttu, which vividly depict the peaceful departure of the great teacher from this troublous world.

The work from the upper monastery (Plate 16) is a sculptured panel bounded by two good examples of the Indo-Corinthian pilaster.

The dying master, fully robed, reclines on a low bedstead furnished with mattress and pillow, by the side of which a tripod is placed, supporting a vessel of cool water. A figure, identified as Devadatta, the malignant cousin, who had pursued Buddha throughout his life with unrelenting hostility, stands at the head of the couch, with an evil expression of satisfied malice.†

A form, apparently that of a female, with her back to the spectator, sits crouching on the ground, and six mourning attendants in various attitudes complete the group. Above the whole hang the boughs of the *sál* tree, the forest king which witnessed alike the advent and departure of the teacher.

The work from the lower Nuttu monastery, reproduced in Plate No. 22, represents the same scene, though with considerable variation in the treatment of details. In this group the total number of figures is increased to thirteen, the most remarkable addition being that of a shaven-headed monk, crawling on hands and feet, and being pulled from under the bed by another monk, who has grasped him by the wrist.

Museum, Calcutta, contains at least one (G. 27). In later Buddhist art, as seen at Kasiá and elsewhere, the subject was frequently treated. The death-bed scene has often been incorrectly referred to as the Nirvána of Buddha, but the term *parinirvána* may be correctly applied to it.

* Cunningham, *Archæol. Rep.*, Vol. I, pp. 76—85; XVIII, p. 55.

† The figure is that of a man holding a dumb-bell-shaped object, like a club or conventional thunderbolt, and this figure in other reliefs, for example, in that representing the scene of the elephant doing homage, must certainly be identified as Devadatta. But the appearance of Devadatta at the death-bed of Buddha appears to be inconsistent with the legend referred to in Fa-hian's Travels, which relates that Devadatta attempted to poison Gautama, and having failed to accomplish the crime, "went down to hell."

Both the compositions above described are admirably balanced, and the attitudes and expressions of all the persons concerned are rendered with vigour and truth to nature. The drapery, as usual, is Greek, or Græco-Roman, in style.

The design of these death-bed scenes is certainly an importation from the west. The recumbent figure on the bed surrounded by mourning attendants is clearly copied from Greek banqueting reliefs of a sepulchral character, as imitated on Roman sarcophagi. A sculpture in the Towneley collection in the British Museum bears a very close resemblance to the reliefs from the Nuttu manastery above described.* I have no doubt that the Gándhára sculptures were copied from Græco-Roman, and not pure Greek, models.

The figure of the founder of their religion was the decorative element most largely used by the Buddhist artists in all their works, with the exception of the earliest buildings in Bihár, Central, and Western India, where symbols occupy the place afterwards taken by images. In the countries on the north-west frontier of India, the image of the personal Buddha had become an object of worship at least as early as the latter part of the first century A. D., when it was stamped on coins of Kanishka.†

There is, therefore, no reason to be surprised at the fact that hundreds of sculptures from Gándhára, in various sizes, represent the seated or standing Buddha, posed in one or other of the conventional attitudes (*mudrá*), either buried in meditation, or engaged in exhortation. Such figures are often executed in large numbers on the face of a single slab. Multitudes of specimens present the founder of Buddhism engaged with other persons in one or other incident of his ministry or the preparation for it.

A deeply-cut relief, found at the village of Mohammad Nari, and reproduced in the first plate of Major Cole's book, is a good illustration of the oft-repeated figure of the teaching Buddha, who is here shown seated cross-legged on an open lotus-flower, with his feet draped in a gracefully disposed robe. His right shoulder is bare, and his hair is arranged in formal conventional curls, a style which in later times became the only orthodox arrangement for the hair both of Buddhist and Jain statues.

* *Engravings from the ancient marbles in the British Museum, Part V, Plate III, fig. 5, London. 1826.* In this work the Towneley relief is described as being of Roman origin, but it may be Greek. Prof. Gardner informs me that the Greek works of this class are referred to the period extending from B. C. 300 to A. D. 1.

† Gardner, *Catalogue of Coins of Greek and Scythic Kings of Bactria and India*, pp. 130, 133, 175, Pl. XXVI, 8; XXVII, 2; XXXI, 14.

The central image of the composition, the lotus-throned Buddha, occupies a niche formed by a dentilled cornice resting on Indo-Persian pillars. The rest of the slab is occupied by a profusion of "Buddhist railings" and other architectural details, as well as by a multitude of small human figures, which it would be tedious to describe at length.

The bare right shoulder and formal hair might be supposed to suggest a late date, but the style of the architectural ornaments and the fine execution of the work indicate, in my judgment, that it should be referred to the first half of the third century A. D. I have already noted that this slab is adorned with Indo-Corinthian pilasters as well as Indo-Persian pillars.

One of the most elegant images of the standing, preaching Buddha is the small statuette from the Mián Khán monastery depicted in figure 3 of Major Cole's Plate 27. The expression of the face is sweet and calm, and the drapery is rendered in the best style. Both shoulders are covered, and the hair, coiled in a top-knot, is artistically and truthfully sculptured. This work seems to me to be of earlier date than the Mohammad Nari specimen, and is probably not later than A. D. 200.

The fine sculpture from the upper monastery at Nuttu (Cole, Plate 12) shows Buddha, wearing moustaches, and with both shoulders covered, seated cross-legged on a low stool under a *sál* tree, addressing a company of adoring disciples of both sexes.

The balanced grouping of this composition is as skilful as that of the death-bed scenes.

The three sculptures above described belong to the best period of the Gándhára school of art.

A statuette of the seated Buddha, about 13 inches in height, executed in blue slate, is shown in Plate IX, fig. 2, and is an example of the school in its decadence. A similar statuette was obtained at Ránígat,* and is fairly good work, though not of the best stylo.

Another statuette of the seated Buddha, found at Sháh kí dhorí, the ancient Taxila by Mr. L. White King, seems to be of comparatively late date, having a Hindú, rather than a Buddhist appearance.

* The great fortress of Ránígat, (also known by the names of Nográm, or Navagrám, and Bággrám), is situated sixteen miles north of Ohind, and just beyond the British frontier. Tribal feuds render the place difficult of access, and, when Mr. King visited it, he required the protection of a strong escort. The ruins have, consequently, never been thoroughly explored. Sir A. Cunningham gives weighty reasons for identifying the site with Aornos, the stronghold which resisted Alexander. The surface of the various courtyards is covered with fragments of "statues of all sizes, and in all positions." (*Archæol. Rep., Vol. II, pp. 96-111; V, p. 55*). Major Cole in his Second Report notes the existence of seven *topes* or *stápas* within the limits of the fortress, and gives a rough plan on a very small scale.

The foregoing descriptions prove that during the most flourishing period of Gándhára art, which I assign to the years between A. D. 200 and 350, the conventional representation of Buddha had not been finally determined, and that it was legitimate to make his imago either with or without moustaches, and with the right shoulder either bare or draped. The figure of Buddha on the Amarávati slab No. 11 exhibited on the British Museum staircase has both shoulders draped, but in Buddhist art, as a rule, the founder of the religion is represented with the right shoulder uncovered, and without moustaches.

It has also been shown that the artists of Gándhára were at liberty to give Buddha either the formally curled hair, which in later times, became an indispensable attribute, or to carve his hair artistically in accordance with nature.

The treatment of the hair both of Buddha and other personages in most of the good sculptures from Gándhára is so artistic, and so far superior to the feeble conventionalism of ordinary Indian art, that it may be well to dwell on the subject for a moment.

I agree with Dr. Anderson, in the opinion expressed by him that the woolly hair like that of a negro, arranged in stiff, formal, little curls which is characteristic of the Jain images executed in the tenth and subsequent centuries, and of many Buddhist statues of earlier date, does not indicate, as has been supposed, any racial peculiarity of the Jain and Buddhist saints, but is purely conventional.

Dr. Anderson suggests that this mode of representing the hair is merely an archaistic survival, and that "the hair of the Blessed One having once been carved in this depraved fashion, it was slavishly followed after, with a few exceptions, among which were the sculptors of Gándhára."*

The exact origin of this archaistic treatment of the hair does not at present appear to be traceable, but, whether it be ever discovered or not, it is probable that the explanation suggested above, is, in general terms, the correct one, and that there is no occasion for holding with Mr. Fergusson, that "it has ever been one of the puzzles of Buddhism that the founder of the religion should always have been represented in sculpture with woolly hair like that of a negro."†

As a matter of fact he is not always so represented, nor is the woolly hair peculiar to his images. The puzzle, if it be a puzzle, is one in the history of art, not in the history of religion.

The archaic 'wiry' style of representing the hair was maintained

* Anderson's *Catalogue*, Part I, p. 259. Cf. *ibid.*, p. 175; and *Indian Antiquary*, Vol. IX, p. 116.

† *Tree and Serpent Worship*, 2nd ed., p. 135.

by Greek artists in bronze longer than in marble,* and this observation may possibly serve as the explanation of the woolly-haired Buddhas, which may be conjectured to have been derived from a bronze prototype.

I cannot venture on trying the patience of my readers by describing even a few of the many friezes and panels which vividly present incidents of Buddha's life and preaching, such as his visits to ascetics and Nāga kings, and his miraculous escapes from the snares laid by Devadatta. The compositions are like most Roman work, generally crowded with figures, which it would be tedious to describe in detail. Good illustrations of several are given in Major Cole's Plates.

A blue slate panel, about 13 inches in height, representing in high relief a *chaitya* front filled with small figures of Buddha and worshippers, the original of which is in the Lahore Museum, a cast being in Calcutta, is reproduced in Plate IX, fig. 3, and is a fair example of a very numerous class of works.

The sculptors of Gándhāra were not restricted in their choice of religious subjects to the birth, death, meditation, miracles, and preaching of Gautama.

At the time when they flourished, Buddhist literature had attained vast dimensions, and offered, in the collections of *Jātakas*, or Birth-stories relating to the adventures of the Buddha in his previous births, an inexhaustible treasury of subjects for the art of the painter and the sculptor.

That subjects of this class frequently formed the theme of the Greco-Buddhist artists can be perceived from the mutilated extant fragments of their compositions, though the brittleness of the stone in which their works were generally executed is such that few of the innumerable friezes which decorated the buildings of Gándhāra have been preserved in a condition sufficiently perfect to permit of their story being clearly read.

The best preserved connected series of story-telling sculptures is that which adorned the risers of the sixteen steps leading to the central *stūpa* of the monastery at Jamálgarhí, excavated by Lieut. Crompton and Sir A. Cunningham.†

* Perry, *Greek and Roman Sculpture*, p. 351.

† Lieutenant Crompton's report has not, so far as I am aware, been printed in full. Its substance is given in the *Indian Antiquary*, Vol. III, p. 143. The friezes of the risers are the only sculptures found in their original position at Jamálgarhí. All the others had been thrown down, and "in many cases large and heavy fragments of the same sculpture were found far apart." Lieut. Crompton hence concluded that the buildings had been "destroyed by design, and not by natural decay." Sir A. Cunningham's catalogue of the sculptures of the risers arranged in the order of the steps is given in *Archæol. Rep.*, Vol. V, p. 199.

These reliefs excited the warm admiration of Mr. Fergusson, and are certainly deserving of high praise.* Unfortunately they are far from complete. The surviving portions, however, are of considerable extent, and are available for study in Cases 1—3 of the Asiatic Saloon in the British Museum. The arrangement in the museum is arbitrary, and determined rather by the dimensions of the cases than by the order of the steps, or the subject of the sculptures.

When first discovered the series was more nearly perfect, and the discoverer was able to recognize two *Játakas* or Birth-stories, the *Wes-santara* and the *Sáma*.

The latter may be read pretty clearly from the remains in the British Museum (Cases 1—3, tier No. 4). The recognizable scenes are briefly described by Sir A. Cunningham as follows:—

“1.—The young lad, son of blind parents, filling a vessel with water from a lake frequented by deer.

2.—The youth, shot accidentally by the Rájá of Benares, who aimed at the deer, is lying on the ground with an arrow sticking in his side.

3.—The Rájá in a pensive attitude, his head resting on his hand, promises to take care of the lad's parents.

4.—The Rájá presents a vessel of water to the blind parents.

5.—The Rájá leads the two blind people by the hand to the spot where their child's body is lying.

6.—The youth restored to life.”

This story occupied the eighth step of the staircase. The *Wes-santara Játaka*, which adorned the fourth step, is exhibited on the fifth tier from the top of the British Museum arrangement.

The extremely small scale of these sculptures, which are only about eight inches high, interferes with the correct proportional rendering of the several parts. The trees, for instance, are altogether out of scale. But, when allowance is made for this defect, which is unavoidable in the execution of complicated designs crowded into a space so limited, these reliefs may rightly be held to deserve much praise for their vigour of execution, and for their realistic fidelity to nature.

An exhaustive description of the various scenes and multitudinous figures in the *alti-relievi* of the Jamálghá staircase would task too severely the patience of the most conscientious reader, but a brief discussion of some of their more interesting features may not be unwelcome.

The uppermost tier in the museum arrangement comprises ten small panels, divided one from the other by broad Corinthian pilasters.

* *History of Indian and Eastern Architecture*, p. 173.

Six of these panels, (from the third step of the staircase), are occupied by female busts with the arms raised, and having acanthus leaves extended like wings from the waist on each side. These little figures at once remind the spectator of the angels with which he is familiar in Christian art. It is quite possible that the sculptors of Gándhára may have picked up some hints from artists connected with the churches of Asia Minor and Syria, and I have a suspicion that they did so, though I cannot offer any decisive proof of the supposed fact. I have no doubt that a real connection exists between early Christian art and the Gándhára school. The four remaining panels (from the fifteenth step) contain each a grotesque bust terminating in two scaly tails.

Above these panels nine remarkable Atlantean statuettes are exhibited, which form, apparently, part of a set of twenty-three obtained at Jamálgarhí by Sir A. Cunningham. He supposes that they "filled the spaces between the large dentils which supported the heavy mouldings of the *stúpas*,"* or, as he elsewhere expresses himself, that "they were arranged in rows to support the lowermost moulding of a building. The figures were generally separated by pilasters."†

Numbers of similar figures have been found. Most commonly they are about eight inches high, but they vary in height from four to eighteen inches.‡

The British Museum specimens range in height from about seven to nine inches. All the figures are in a sitting posture, though the attitude varies. One figure crouches like Atlas, as if oppressed under the burden of a heavy load, while the attitudes of the others seem to express repose rather than the endurance of crushing pressure. Some of the faces are bearded, and some are not. The facial expression is freely varied, and rendered with great spirit and vigour. The muscles of the chest and abdomen are fully and truthfully displayed, with a tendency to exaggeration, and a pair of expanded wings is attached to the shoulders of each statuette.

A group of wrestlers (*G. 82 Calcutta*), and a composition (*G. 89 Calcutta*), catalogued by Sir A. Cunningham as "Herakles fighting with a snake-legged giant," both of which were found at Jamálgarhí, are executed in the same style. The latter work (Plate IX, fig. 4) is

* *Archæol. Rep.*, Vol. V, p. 198.

† *Descriptive List*, p. 2.

‡ *Descriptive List*, and *Indian Antiquary*, Vol. III, p. 144 Sixteen statuettes of this class are in the Calcutta Museum (*G. 81 and 83*). A feeble terracotta imitation of the design has been found far away eastward in the Bogra (Bagrahá) District of Lower Bengal. (*Mn.*, 1, in Andersen's *Catalogue*).

thus described by Dr. Anderson in his Catalogue (Part I, p. 240):—
 “A triangular fragment, with two figures in relief, one lying on the ground with its back towards the spectator, the upper portion being the body of a human being, but the legs terminate from the hips downward in two snake-like coils; the other figure, which is quite nude, has grasped the end of the left coil with his right hand, while with his left hand he has seized the head of the monster, which swings a heavy club to destroy his foe.”

I think that it is impossible to doubt that the group last described is a Buddhist adaptation of the Greek myth of the Gigantomachia, the battle of the gods and giants, which continued for centuries to be a favourite subject of Greek and Roman sculptors and gem-engravers. In Greek and Roman art the giants are represented as winged, and snake-legged, and their figures are generally characterized by exaggerated development of the muscles.

No Indian example appears to reproduce exactly the conventional form of the Greek giant, but the characteristics of that form are all found in the Jamálgarhí carvings, though not all combined in a single figure.

The action of the group which Sir A. Cunningham rather rashly entitles “Herakles fighting with a snake-legged giant” is obviously the same as that of the Greek representations of the Gigantomachia, and the very peculiar conception of the snake-legged giant cannot have been independently invented by the Jamálgarhí sculptors. In this case the wings seem to be wanting, but the Atlantean statuettes, which have not the snake legs, are fitted with wings, and display the exaggerated muscular development of the pattern Greek giant. The little figures with tails, from the fifteenth step, appear related rather to the Tritons than the Giants. Their tails seem to be intended rather for those of fishes than to represent snakes.

The Gigantomachia was so frequently the subject of Greek and Roman works of art that it is impossible to name the precise channel by which a knowledge of it reached India. One of the finest examples of the treatment of the subject is the principal frieze of the great altar of Pergamon, the giants of which are winged, snake-legged, and provided with enormously developed muscles.* It is quite possible that the fame of this great composition may have spread through Asia, and stimulated the imitative faculties of a host of minor artists, including those of Gándhára, but the Gigantomachia was such a hackneyed subject that we cannot venture to name any particular example of its

* Casts of the Pergamene frieze are at South Kensington. Engravings of it will be found in many recent books, e. g. Perry's *History of Greek and Roman Sculpture*.

treatment as the model of the miniature, and comparatively feeble, adaptations of it by the Indian sculptors. The influence of Rome on the sculptures at Jamálgarhí, and the other works of the Gándhára school, belonging to the same period, is so strongly marked that the most probable conclusion is that the Indians derived their knowledge of the artistic use of the Gigantomachia from Roman copies of Greek works.

I strongly suspect that the Indians borrowed from the Greeks the giants themselves as well as the sculptured representations of their battles. The Asuras of Hindú post-Vedic mythology are described as fierce demons, enemies of the gods, and correspond closely with the Greek giants. Recent research has proved, or at least rendered probable, the existence of so much Greek, and even Christian, influence on the development of Hindú mythology that the borrowing of the conception of giants, enemies of the gods, offers no improbability.

Whether the Buddhist sculptors of the Kábul valley intended their snake-legged or winged monsters to be images of Asuras, or merely used them as conventional imitative decoration I cannot undertake to determine.

A group, frequently recurring in Gándhára art, of which four examples have been photographed by Major Cole (Plates 1, 2, 4, and 17), and one is in the Woking Museum, can be demonstrated to be an adaptation of a famous composition by a known Greek artist. Another of the ultimate Greek sources from which the sculptors of Gándhára derived their inspiration is thus determined with certainty. I shall discuss this case with some fulness of detail.

The group referred to represents a plump young woman, fully draped, standing, held in the grasp of an eagle with expanded wings, and is reasonably conjectured to represent the translation to heaven of Mâyá Deví, the mother of Buddha, in order that she might be born again, as related in the Buddhist scriptures. However this may be, it is quite impossible to doubt the correctness of Sir A. Cunningham's opinion, as quoted by Major Cole, that the composition in question is an adaptation of the Rape of Ganymede, a favourite subject of the later Greek artists, and of their Roman imitators.

The bronze work on this theme by Leochares (B. C. 372-330) was considered a masterpiece of that famous artist of the later Attic school, and was praised with enthusiasm by Pliny.

The original has unfortunately perished, but several copies or imitations of it, belonging to various periods, some executed in marble, and some engraved on gems, are extant, and have been figured in many well-known works on the history of art.

One of the marble copies is in the British Museum, another is at Thessalonica, a third at Venice, and a fourth, the finest of all, is preserved in the Museo Pio Clementino at the Vatican.*

In this composition, which most nearly corresponds with Pliny's description of the original, the eagle is represented as supported by the trunk of a tree behind it, with its wings expanded, and neck stretched upwards, and grasping firmly, though tenderly, in its talons the beautiful youth, whose feet have just ceased to touch the receding earth. The robe of Ganymede is dexterously disposed behind his back so as to protect his body from the sharp claws of the great bird, and yet to exhibit the full beauty of the nude figure. A dog, seated below, howls piteously for his departing master.

Critics point out that the addition of the dog to this group, and the insertion of the tree, are not only in accordance with the myth as related by Virgil,† but are of artistic importance as an aid to the imagination by rendering more perceptible the soaring movement of the principal figures, and thus minimizing the objections to a plastic presentation of a pictorial subject.

The Buddhist adaptations omit the dog, and in this respect agree with the groups preserved at Venice, Thessalonica, and in the British Museum, but, in the pose of the eagle, and the introduction of the trunk of the tree, they resemble the Vatican group more closely than any other.

Three of the examples of these adaptations figured by Major Cole (Plates 2, 3, and 4) were found in the ruins at Sanghao. His fourth example (Plate 17) was obtained at the upper monastery of Nuttu, which is situated close to Sanghao. The Sanghao specimens figured in Plates 3 and 4 are duplicates, whereas the Nuttu specimen agrees with the Sanghao sculpture illustrated in Plate 2.‡

* Overbeck (*Mythologie der Kunst*) has pointed out that the extant Rape of Ganymede groups fall into two distinct classes. The first represents the eagle as the messenger of Zeus; the second presents the god himself transformed into the shape of an eagle. The Vatican group is the best example of the first and earlier, the Venetian sculpture is the best example of the second and later type. Engravings of the Vatican group will be found in Visconti's *Museo Pio-Clementino*, Vol. III, p. 149, and in the histories of sculpture by Winckelmann, Lübke, and Perry. A figure of the Venetian specimen is given in Zanetti's work on San Marco. The Thessalonican group is described and engraved in Stuart's *Athens*, III, ch. 9, Pl. II and IX. The Indian adaptations seem to combine the characteristics of both types.

† "Puer quem præpes ab Ida

Sublimem pedibus rapuit Jovis armiger uncis;

Longævi palmas nequidquam ad sidera tendunt

Cnstedes, sævitque canum latrains in auras." (*Æneid*, V, 252-257).

‡ Major Cole says that Sir A. Cunningham found an example of the woman and eagle subject in a knob or plume of a royal statue at Jamálgarhí, which is now

Both the Buddhist variations show a general agreement with one another, though differing considerably in detail. The posture of Mâyá in the specimens figured in Plates 2 and 17 is singularly ungraceful and constrained. As some compensation for this defect her feet are so treated as to suggest the notion that she is really being lifted from the ground, and in this respect these examples are superior to the other two, which altogether fail to convey the idea of upward motion. In both varieties the female figure is fully draped.

The substitution of a fat, round-cheeked, young Indian woman, swathed in heavy drapery, for the nude form of Ganymede instinct with the beauty of Greek youth, destroys all the æsthetic value of the composition, which is, in its Buddhist forms, devoid of life or elegance, and far inferior to the worst Græco-Roman example. The conversion of a Greek theme to their own uses by the Gándhára sculptors is more readily demonstrated in the case of the Rape of Ganymede than in any other, but, unfortunately for their reputation, they were less successful in dealing with this subject than almost any other which they attempted. Probably it would be correct to say that a purely ideal subject was beyond their powers.

A very curious panel in the Lahore Museum, of which a cast is exhibited at South Kensington, has been differently interpreted by Sir A. Cunningham and Dr. Leitner.

The former describes it as a "portion of a large sculpture, containing eleven figures. The three lower ones are soldiers armed with spears and shields; but the rest, with their animal's heads, large mouths, and sharp teeth, are probably intended for demons. As such they may have formed part of the army which Mára brought to frighten Buddha during his ascetic meditation under the Bodhi tree." (*Descriptive List*, 538.)

The three soldiers in the lower compartment, marching one behind the other, are certainly not Indian in style or equipment. They are Greek, not Roman warriors. Two of them carry long oval shields, the shield of the third differs in shape, having a rectangular body, and circular head, with narrow neck. Sir A. Cunningham's conjecture as to the meaning of the composition fails to explain the presence of these soldiers.

Dr. Leitner, who has seen Buddhist masquerade processions in Ladákh, informs me that he regards the monstrous forms in the upper part of the panel as intended to represent the masks of the Vices in a

in the Calcutta Museum, but the Catalogue does not mention any such specimen. G. 40, a sculpture ten inches high, seems to deal with the same subject, although Dr. Anderson does not recognize it. So large an object can hardly have formed part of a knob or pinna.

procession of Vices and Virtues, and that the soldiers may be interpreted as the escort. In his Catalogue he gives a somewhat different explanation.

Whatever be the correct interpretation of this strange composition, it is certainly one of the best, and presumably among the earliest, works of the Gándhára school. All the figures are well executed, and the aged and monstrous heads in the upper compartment are carved with great cleverness and spirit. It probably, like the Athéné, belongs to the pre-Roman period.

Inasmuch as my object in this paper is not the publication of an exhaustive monograph on the Gándhára school of sculpture, but the presentation of a general view of the modes of Græco-Roman influence on India, though with special refereneo to the Gándhára sculptures, I shall not proceed further in the detailed description of works from the Kábal valley, which deal with subjects obviously belonging to the domain of Buddhist mythology.

Certain decorative elements, which are not peculiar to the Gándhára school, but also occur in the earlier sculptures at Bhárhut and Buddha Gayá in the interior of India, are mythological, but not in themselves, so far as appears, specially connected with Buddhist mythology. I allude to the hippocamps, centaurs, tritons, and various winged and other monsters, which are frequently met with. These forms, which are certainly of Græco-Roman origin, so far as India is concerned, were probably used by the Buddhist artists for purely decorative purposes, without any definite symbolical meaning. Such monsters were common in Greek art, and are supposed especially to characterize the works of the followers of Scopas.

The comic friezes in which boys are shown pulling cattle by the tails, riding on lions, and disporting themselves in sundry fantastic ways, are obviously not Indian in design. Major Cole's plate 26 illustrates a tolerably good specimen from the Mián Khán monastery of such a comic frieze, the figures in which are boys mounted on lions.

The direct model for these works was probably found in Roman art. Their ultimate source is to be traced to the Alexandrian compositions depicting the "*erotopegnia* (love-sports, amatory poems) of the Anacreontic school, in which Eros becomes a boy, and rides all sorts of wild animals and monsters, lions, panthers, boars, centaurs, hippocamps, dolphins, dogs, and deer."^{*}

Among the remains of the Gándhára sculptor's work an extraordinary abundance of detached human heads, chiefly executed in stucco, is met with.

* Perry, *History of Greek and Roman Sculpture*, p. 629.

The cases in the British Museum contain a series of about forty such heads, varying from life-size to very small dimensions. Most of these were obtained in the Pesháwar District, and purchased in 1861 through the late Mr. Thomas.* They are as varied in character as in size, and comprise old and young, male and female, serious and comic. Almost all are good, but I was particularly struck by the head, five or six inches in height, of an aged, emaciated, and bearded man, and the very remarkable life-size head of a laughing youth, with large straight nose, big projecting ears, and a curl of hair on his forehead.

Dr. Leitner has a considerable number of similar heads in his collection, and, as he observes, it is impossible not to notice the resemblance between them and the heads found in Cyprus, specimens of which may be seen in the British, South Kensington, and Woking Museums.

The specimens from the Pesháwar District, in the Indian Museum, Calcutta, marked P 1--18, are similar, and some particularly good examples of such heads, found in the Mián Khán monastery, are figured in Major Cole's Plate 28.

Two plaster heads of this class are figured in plate IX, fig. 5, *a* and *b*. They are about each six inches in height. The head reproduced in fig. *a* is very Greek in feature, though Indian in ornament. The photograph, in consequence of foreshortening, does not do the face full justice.

The great abundance of such detached stucco heads is probably to be explained, at least in part, by the following observation of Masson, who notes that at the village of Hidda, near Jalálábád in the upper Kábul valley, "idols in great numbers are to be found. They are small, of one and the same kind, about six or eight inches in height, and consist of a strong cast head fixed on a body of earth, whence the heads only can be brought away. They are seated and clothed in folds of drapery, and the hair is woven into rows of curls. The bodies are sometimes painted with red lead, and rarely covered with leaf-gold; they appear to have been interred in apartments, of which fragments are also found."†

Section IV. HELLENISTIC SCULPTURE IN INDIA PROPER.

An exhaustive examination of all the known remains of early Buddhist sculpture which exhibit traces, more or less distinct, of teaching derived from Greek sources would, I fear, be extremely tedious,

* Information kindly supplied by A. Franks, Esq., F. R. S.

† *Ariana Antiqua*, p. 113.

and would certainly extend this paper far beyond the limits to which I desire to confine it. The Hellenistic influence on India Proper was slight, and no site in the interior of India contains the remains of a distinct, well-established Greek, or Græco-Roman, school of art, such as existed in Gándhâra. I shall, therefore, content myself with a mere passing reference to most of the Indian cases in which the marks of western art teaching have been detected, and shall describe in detail only a few specially interesting works.

The honeysuckle ornament on the capitals of some of the menoliths of Aśoka (B. C. 250) is the earliest example of a Greek form of decoration applied to Indian work. Mr. Fergusson has suggested that Aśoka borrowed this ornament direct from its Assyrian or Babylonian birth-place, and not from the Greeks,* but, considering the fact that, even in Aśoka's time, Assyrian and Babylonian art belonged to a distant past, it seems much more natural to suppose that the Ionic honeysuckle ornament was introduced into India from the Greek kingdoms of Asia with which Aśoka was in communication.

I have already alluded to the tritons, hippocamps, and other marine monsters which formed part of the ordinary Greek decorative stock-in-trade, and passed into Indian art.

The centaur, another characteristic Greek form, is found among the sculptures at Bhârhut, dating from about B. C. 150, and among those at Buddha Gayâ, which are somewhat earlier.†

The chariot of the sun, in Indian mythology, is drawn by seven steeds. At Buddha Gayâ in Bihâr, and again at Bhâjâ in the Bombay Presidency, we find it represented drawn by four steeds, as in Greek art.‡ Mr. Fergusson also draws attention to the Greek look of "the figure of the spear-bearer" in the Bhâjâ cave temple.§ The same writer detects the presence of a distinctly Greek element in the well-known sculptures of Amarâvatî on the Krishna river, and such an element may certainly be traced in them, though its presence is not very obvious on casual inspection.||

* *Cave Temples*, p. 521.

† For a full descriptive account of the sculptures at Bhârhut, see Sir A. Cunningham's special work on the subject. Centaurs at Buddha Gayâ and Bhârhut are described in Anderson's *Catalogue*, Part I, p. 129, where further references are given.

‡ For the Buddha Gayâ sun chariot, see Cunningham, *Archæol. Rep.*, Vol. III, p. 97; *Buddha Gayâ* by Râjendralâl Mitra, Plate L; Fergusson and Burgess, *Cave Temples*, p. 521. For the Bhâjâ example of the same design see *Archæol. Survey of W. India*, Vol. IV, p. 5, Pl. VI.

§ *Cave Temples*, p. 521, Pl. XCVI, 5.

|| See *Tree and Serpent Worship*, 2nd ed., pp. 106, 172.

The most distinct and conspicuous remains of Indo-Hellenic art in the interior of India are those which have been discovered at the ancient city of Mathurá, situated on the Jamuná about thirty-five miles from Agra.

A group in sandstone, found at or near Mathurá, was described and figured more than fifty years ago by James Prinsep as representing Silenus with his attendants, and a second corresponding, though not identical, group has since been discovered by Mr. Growse in the neighbourhood of the same city.

The block first found is three feet broad, and three feet eight inches high, hollowed on the top into a shallow basin, perfectly smooth, and originally nearly circular, and is sculptured back and front with figures in high relief.

"In the front group the principal figure is a stout, half-naked man, resting on a low seat, with wig or vine-crowned brow, out-stretched arms, which appear to be supported by the figures, male and female, standing one on each side. The dress of the female is certainly not Indian, and is almost as certainly Greek. * * * Prinsep agrees with Stacey in considering the principal figure to be Silenus:—'His portly carcass, drunken lassitude, and vine-wreathed forehead, stamp the individual, while the drapery of his attendants pronounce them at least to be foreign to India, whatever may be thought of Silenus' own costume, which is certainly highly orthodox and Brahmanical. If the sculptor were a Greek, his taste had been somewhat tainted by the Indian bean-ideal of female beauty. In other respects his proportions and attitudes are good; nay, superior to any specimen of pure Hindu sculpture we possess; and, considering the object of the group, to support a sacrificial vase (probably of the juice of the grape), it is excellent.'"*

Prinsep's account of the purpose of the block described by him, and his interpretation of the sculptures have both been disputed. I shall not enter into the controversy on the subject, which may be read in the works cited in the note. Personally, I am of opinion, that the drunken man is an Indian adaptation of Silenus.

A third work, much in the same style, and still more obviously

* Cunningham, *Archæol. Rep.*, Vol. I, p. 243. Prinsep's original account will be found in *Journal As. Soc. of Bengal*, Vol. V, (1836), pp. 517, 567, Pl. XXXI. The sculpture described by Prinsep and its subsequently discovered companions are discussed by Mr. Growse, and illustrated by good plates, in the same *Journal*, Vol. XLIV, Part I (1875), p. 212, Pls. XII, XIII, and are further commented on by the same writer in *Mathurá, a District Memoir*. See also Anderson's *Catalogue*, Part I, pp. 170—176.

Greek in subject and treatment, was discovered in 1882 by Sir A. Cunningham, also at Mathurá, where it served an humble purpose as the side of a cattle-trough. This unique specimen now adorns the Indian Museum, Calcutta. Dr. Anderson's careful, though rather awkwardly worded, description of it is as follows:—

"M. 17.—A figure of Hercules in alto-rilievo, 2 feet 5 inches high, strangling the Nemean lion. The latter is represented standing erect on its hind feet, but grasped round the neck by the left arm of Hercules, who is pressing the neck against his shoulder. The right arm of the statnette is broken off, but, as the axilla is exposed, the arm had been represented raised and bent on itself at the elbow, so that the hand had been brought down close to the shoulder, but hidden in the foliage behind the figure, the tree being the same as occurs in the Silenus group. The greater portion of the knotted club is seen behind the right side of the figure. The action, therefore, is not only that of strangling, but of clubbing the lion as well. The head of Hercules has been lost, and the front part also of the head of the lion. He (*scil.* Hercules) is represented as having worn the skin of an animal over his back, as the front limbs are tied before his chest in a loop-knot, the free ends being the paws. The beard of the lion is indicated by parallel pendants, and, on the full rounded left cheek, there is a somewhat stellate figure with wavy arms, probably a rude Swastika. The fore-limbs of the lion are raised to the front of its neck, grasping the left hand of Hercules, but they are very feebly executed. The general art characters of the figure are essentially Grecian, but, in the attitude in which Hercules is placed towards the lion, and the consequent position of his right-arm, it would be extremely difficult to deal any but the most feeble blow. Although there is considerable anatomical accuracy in delineating the position of the various muscles brought into play in Hercules, the lion is devoid of action and badly shaped."*

These Mathurá sculptures have very little in common with those of Gándhára, and seem to be the work of a different school. They have not the Roman impress which is so plainly stamped on the art of Gándhára, and are apparently the result of Greek teaching conveyed through other than Roman channels. It is difficult to fix their date with precision. It cannot well be later than A. D. 300, and the style is not good enough to justify the suggestion of a very early date. Perhaps A. D. 200 may be taken as an approximate date for these works, but at present their chronological position cannot be definitely determined.

* *Catalogue*, Part I, p. 190.

They are by no means, in my opinion, equal in merit to the best of the Gándhára Indo-Roman sculptures, which I assign to the third century A. D.

The Mathurá group of Herakles and the lion may be contrasted with the widely different representation of the same subject recently found at Quetta in Balúchistán. A much corroded copper or bronze statuette, two and a quarter feet high, discovered at that place, shows the hero standing, and holding under his left arm either the skin or dead body of the slain lion, the right arm being wanting.* This work, to judge from the published plate, has an archaic look, and bears a curiously close resemblance to the colossal figure found at Khorásábád in Assyria, fancifully named Nimrod by Bonomi, and designated the Assyrian Hercules by other writers. "He is represented strangling a young lion, which he presses against his chest with his left arm, while he is clutching in his hand the fore-paw of the animal, which seems convulsed in the agony of his grasp. In his right hand he holds an instrument which we infer to be analogous to the boomerang of the Australians," etc.†

I cannot venture to assign even an approximate date for the Quetta statuette, and can only say that it is certainly an early work.

Section V. THE CHRONOLOGY AND AFFINITIES OF THE GÁNDHÁRA OR PESHÁWAR SCHOOL OF SCULPTURE.

It is impossible to determine the affinities of a school of art until its chronological position is known at least with approximate accuracy. Apparent resemblances between the works of different schools are apt to be delusive and misleading unless checked by chronological dates independent of the idiosyncrasies of the critic. On the other hand, the style of the works of art, the date of which is in question, is in itself, when used with due caution, an essential element for the determination of the chronology, if conclusive external proof is not forthcoming. In the case of the Gándhára school its chronology and affinities are both still to a large extent undetermined. I shall quote subsequently the divergent judgments of the principal authorities on the subject. For the present I shall confine myself to the examination of the external evidence for the chronology of the Gándhára sculptures. This evidence falls chiefly under three heads, namely, (1) Epigraphic, (2) Numismatic, and (3) the records of the Chinese pilgrims. The pilgrims' testimony, supplemented

* *Journal As. Soc. of Bengal*, Vol. LVI, p. 163, Pl. X.

† Bonomi, *Nineveh and its Palaces*, 2nd ed., p. 163, Plate X.

by scanty historical data from Indian sources, will be more conveniently dealt with in connection with the internal evidence derived from style. The other two heads may here be considered.

The epigraphic material in the Gándhára region is unfortunately meagre in quantity, and the little that exists gives but a small amount of information.

The local inscriptions, known in 1875, are enumerated by Sir A. Cunningham,* and comprise the following records, namely, from

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|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1.) Jamálgarhí. | (α) Certain mason's marks;
(β) The Indian names of a weekday and a month on a pilaster;
(γ) Seven unintelligible letters, read as <i>Saphaë danamukha</i> , incised on the back of the nimbus of one of the statues supposed to be those of kings. |
| (2.) Kharkai. | (α) Masons' marks;
(β) Three characters, read as <i>a, ra,</i> and <i>de</i> , on the sides of a small stone relic-chamber. |
| (3.) Zeda. | Inscription of Kanishka dated in the year 11. |
| (4.) Olind. | A fragment dated in the month Chaitra of the year 61. |
| (5.) Takht-i-Bahí. | Inscription dated in the 26th year of Mahárája Gudaphara, in the year 103 of an undetermined era. |
| (6.) Panjtár. | Inscription of a Mahárája of Gushánu or Kushán tribe, dated in the year 122. |
| (7.) Saddo. | The Indian name of a month on a rock. |
| (8.) Sahri-Bahlol. | The Indian name of a month on a fragment of pottery. |

Inasmuch as Taxila may be included for the purposes of the history of art in Gándhára, the Taxila inscription of the Satrap Liako Kusnlako, dated in the 78th year of the great king Moga, should be added to the above list.

I have lately obtained an inscription on the pedestal of a statuette of Buddha dated in the year 274.

All the inscriptions above referred to are in the alphabet variously designated as Arian, Ario or Ariano-Páli, or Baetrio-Páli, which is written from right to left, and was employed by Aśoka (B. C. 250) in

* *Archæol. Rep.*, Vol. V, pp. 57—64.

his edict inscription engraved on the rock at Sháhábzágarhí (Kapurdagiri) in the Gándhára country. The use of this alphabet never became general in the interior of India, and certainly died out there altogether at an early date, not much subsequent to the Christian era.

These facts have been utilized by Sir A. Cunningham as an argument for the early date of the Gándhára sculptures, but the argument seems to me devoid of all force. When he wrote his Report the latest known date for an Arian inscription was the year 122, recorded in the Panjtár document, and this date was then believed to refer to the era known by the name of Vikrama, B. C. 57. Sir A. Cunningham, therefore, argued "As no Indian letters have been found on any of them, I conclude that the whole of the sculptures must belong to the two centuries before and after the Christian era, as the Arian characters are known to have fallen into disuse about A. D. 100 or a little later."

No one now believes that the Indo-Seythian era is the same as that of Vikrama, and most archaeologists hold, though conclusive proof is still wanting, that the Indo-Seythian inscriptions are dated in the Saka era of A. D. 78. If this correction be applied, Sir A. Cunningham's argument will mean that all the Gándhára sculptures must be prior to A. D. 250.

One premise of this argument has been destroyed by the discovery of an Arian inscription dated 274, equivalent to A. D. 352, if referred to the Saka era. That inscription at the present moment happens to be the latest known, but there is no reason why one still later should not be found. The absence of Indian letters on the Gándhára sculptures simply proves that the Indian alphabet was not used in that part of the country, which fact was known already for an earlier period from the existence of Aśoka's Sháhábzágarhí inscription.

The Arian character never took root in India Proper, and its early total disuse there gives no indication as to the date of its disuse in its original home in the countries on the north-west frontier. I should not be surprised, if an Arian inscription dated as late as A. D. 500 should be discovered in Afghánistán or the Western Panjáb.

The Gándhára sculptures can be proved, on other grounds, to be earlier than A. D. 500, up to which date the Arian character may well have continued in use in the country where they occur. The fact, therefore, that the Gándhára inscriptions are all in the Arian character, does not help in any way to fix the date of the sculptures, much less does it prove that they are earlier either than A. D. 100 or A. D. 250.

Among the inscriptions in Sir A. Cunningham's list those from Zeda, Ohind, Takht-i-Bahí, Panjtár, Saddo, and Sahri-Bahlol, are not closely associated with Græco-Buddhist sculptures. The valueless Saddo

fragment inscribed on a rock is the only one among these records found in its original position. These inscriptions consequently give no warrant for the assumption that the Græco-Buddhist sculptures are contemporary with Kanishka or Gondophares, who are mentioned in some of the documents.

The Arian inscriptions at Kharkai and Jamálgarhí are incised on works of the Græco-Buddhist or Gándhára school, but are too fragmentary to be of any use. Sir A. Cunningham wishes to read the characters *a, ra, de*, on the Kharkai relic-chamber as *Árya Deva*, the name of a Buddhist patriarch who flourished late in the first century A. D, but this interpretation is purely conjectural, and cannot be admitted.

The result of all the foregoing discussion is the negative conclusion that, with the exception of the image of Buddha dated 274, no epigraphic evidence to prove the date of the Gándhára sculptures has yet been discovered.

This unique dated inscription is of sufficient interest to deserve a particular description. I am indebted to the kindness of Mr. L. White King, B. C. S., for permission to publish it.*

In or about the year 1883, at Hashtnagar, the site of the ancient Pushkalávati (Peukeloaitis), Mr. King came across a statue of the standing Buddha, which was ignorantly worshipped by the Hindús as an orthodox deity. He could not carry away the statue, but was allowed to remove its inscribed pedestal, a photograph of which is reproduced in Plate X.

The pedestal, like most of the Gándhára sculptures, is composed of blue slate, and is $14\frac{3}{4}$ " long by 8" high. Its front is adorned by an alto-rilievo, enclosed between two Indo-Corinthian pilasters, and representing Buddha seated, attended by disciples, who seem to be presenting offerings to him.

An Arian inscription, consisting of a single line of character, deeply and clearly cut, and in great part excellently preserved, occupies a smooth band below the relief. This band was evidently prepared for the inscription, which must have been executed at the same time as the sculpture. The record is incomplete at the end, and the lost portion, which is of very small extent, may have contained the name of the person who dedicated the image.

The extant portion was read by Sir A. Cunningham, for Mr. King, as follows:—

* I have already printed a brief notice of this inscription, accompanied by a lithograph taken from a rubbing, in *Indian Antiquary*, Vol. XVIII, (1889), p. 257. The photograph is now published for the first time.

"*Sam* 274 *emborasmasa masasa mi panchami* 5—" The record, as it stands, consists of a date, and nothing more. The month is stated to be intercalary, but is not further named. The numerals are distinct, and their interpretation seems to be free from doubt. The notation is clumsy, and may be rendered thus in Roman numerals, II C XX XX XX X IV, = 274.

The main question suggested by this very scanty record is that of the identity of the era referred to.

The locality in which the inscription was found suggests that the date might be expressed either in the era of Gondophares, as used in the Takht-i-Bahí inscription, or the era of the great king Moga referred to in the Taxila record of Liako Kusulako, or in the era, generally identified with the Saka era, which was employed by Kanishka. These are the only three eras, in which Arian inscriptions from the Gándhára region are known to be dated, and it is reasonable to assume, in the absence of evidence to the contrary, that the number 274 refers to one or other of these epochs. The initial point of no one of the three has yet been ascertained, and consequently an exact date for the new inscription cannot be fixed in any case. But the approximate beginnings of all three eras can be determined by numismatic evidence, and one of two approximate dates can be selected for the inscription.

The coins indicate that the eras used both by Moga and Gondophares must have their starting points about the middle of the first century B. C., and, so far as appears at present, the two may have been identical. For the purpose of selecting an approximate date for the inscription they may be treated as one, and as equivalent to the era B. C. 57, known to the later ages as the Vikrama Samvat.*

* Assuming that the Mahárája Gnduphara of the Takht-i-Bahí inscription is identical with the sovereign whose name is variously given on coins, in the genitive caso, as Undopierrou, Gondopharon, Gudapharasa, Gudaphanasa, and Gadapharasa, or, in the nominative caso, as Undophares; and assuming further that all the coins alluded to were struck by one king, then the numismatic evidence indicates that he flourished in the first half of the first century B. C. (See *Gardner's Catalogue of the Coins of the Greek and Scythic Kings*, pp. XLIV, 103—108, Plates XXII, XXIII, XXXII). The year 103 of Gondophares would therefore fall about the middle of the first century A. D., and, for rough approximations, his era may be regarded as identical with that of Vikrama.

Assuming that Moga of the Taxilan inscription is identical with Maues, who is known from coins, his date must be fixed as about 60 or 70 B. C., which, again, is nearly synchronous with the era of Vikrama (See *Gardner*, pp. XXXIII, XLIX. For the Taxilan inscription see *Cunningham, Archæol. Rep., Vol. II, p. 132, Pl. LIX, and Vol. V, p. 67*).

I must not, of course, be understood to suggest that as a matter of fact either Moga or Gondophares used the era afterwards known as the Vikrama Samvat. I use

If then the Hashtnagar inscription is dated in the era either of Moga or Gondophares its approximate date is $274 - 57 =$ A. D. 214.

Though demonstration that Kanishka used the Saka era is still wanting, there is no doubt that the era of his inscriptions does not differ, at the most, more than about twenty years from the Saka, and for the present purpose the era of Kanishka may be taken as identical with the Saka, A. D. 78. Assuming that this era was used in the Hashtnagar record, its date is A. D. 352. The alternative *approximate* dates, therefore, are A. D. 214 and 352.

The style of the Hashtnagar alto-relievo appears to me to be decidedly inferior to that of most of the Mián Khán, Jamálgarhí, Nuttn, and Sanghao sculptures. The figures in it are not undercut, as they are in the best specimens of Græco-Buddhist art, and the execution, on the whole, is poor. So far as I can judge, the work cannot well be older than the middle of the fourth century.

This dubious conclusion is the only assistance given by epigraphic evidence for determining the problem of the age of the Gándhára sculptures.

The numismatic testimony is nearly as scanty and weak as the epigraphic.

The undisturbed hoard of the coins of Azes buried below the Taxila temple with the Ionic pillars indicates, as argued above (p. 115), that that edifice is to be dated from about the beginning of the Christian era, and this inference is in harmony with the reasoning based on considerations of architectural style. It is, as I have already observed, impossible to decide whether the plaster statues found in the Taxilan temple are contemporary with it or not, for no information concerning their style has been published. The coins of Azes found at Taxila, therefore, give no clue to the chronological position of the Gándhára school of sculpture, excepting a few of the earliest works, especially the Pallas, already discussed (p. 121). The only localities, so far as I can ascertain, where coins have been discovered in close association with remains of Græco-Buddhist, or Romæo-Buddhist, sculpture, are Jamálgarhí and Sanghao.

Lieutenant Crompton in his report on excavations at the former site says nothing about coins beyond the unsatisfactory remark that "a few silver and copper coins were turned up;"* but Sir A. Cunningham

the epoch B. C. 57 merely as a short expression for any era which began somewhere about the middle of the first century B. C., and about which more accurate knowledge is wanting. The Avian inscriptions from the Gándhára country have not yet been properly edited, and the published translations are quoted with reserve.

* *Indian Antiquary*, Vol. III, p. 144.

is a little more explicit, and records that, during the progress of the explorations, eight coins are discovered, seven of which bore the name of Bazo Deo, or Vasu Deva.*

Unfortunately no more particular account of these coins has been published. We do not know either the circumstances of their discovery, or their numismatic type, and consequently can draw no positive inference from the fact that they were found. Coins bearing the name of Bazo Deo or Vasu Deva continued to be struck for a long period, but none of them are earlier than about A. D. 150,† and all we can say is that the discovery of Bazo Deo coins at Jamálgarhí is perfectly consistent with the inferences to be drawn from the style of the sculptures found in that locality, even if it be assumed, which is not proved, that the coins are contemporary with the sculptures. The coins, for all that appears to the contrary, may have been struck in the third century.

The only other locality where the discovery of coins can be held to afford evidence for fixing the chronology of Gándhára sculpture is Sanghao. The discovery is reported by Major Cole, a good explorer and photographer, but a bad archæologist, as follows:—

“The site where the sculptures were dug is perched on a steep spur, and was the first excavation done under my superintendence in January, 1883. The building revealed two distinct periods, and consists of a *basement* containing small tops, and of a *superstructure* of plain apartments, built obliquely over the *basement*, apparently without reference to its plan.

“The sculptures were found in the *basement*, and belong to the older period; coins of Kanishka, A. D. 80 to 120, were found in the *superstructure*, and belong to the more modern period.”‡

The Kanishka coins were found along with a brass ring in the so-called ‘treasury,’ “in earthen ware jars embedded in the floors at the corners A and B,” as shown in the plan.§

The sculptures referred to were sent to the Lahore Museum, and form the subject of Plate II of Major Cole’s volume of heliogravures.

A coin of Gondophares was also found somewhere in the same group of buildings.|| Gondophares reigned about A. D. 30, but the mere fact that a coin of his was found at Jamálgarhí would, at the most, prove

* *Archæol. Rep.*, Vol. V, p. 194. The date assigned to Bazo Deo in this passage is admittedly erroneous.

† Gardner, *Catalogue of Coins of Greek and Scythic Kings*, pp. lii, 159—161 Pl. XXIX.

‡ Cole, *Third Report of the Curator of Ancient Monuments in India*, for the year 1883-84, p. cx.

§ Cole, *Second Report*, for 1882-83, p. cxx, Pl. 3.

|| Cole, *Third Report*, p. cx.

an early occupation of the site. It is no evidence of the date of a particular set of sculptures

The discovery of coins of Kanishka in the superstructure of the Jamálgarhí monastery, above the basement containing the sculptures, is a much more weighty fact, and undoubtedly seems to warrant Major Cole's inference that the sculptures are earlier than A. D. 100. Nevertheless, I am convinced that the inference is a mistaken one. I fully accept Major Cole's account of what he saw, but it is quite possible that he did not see all that ought to have been observed. He is a strong believer in Sir A. Cunningham's theory of the early date of the Gándhára sculptures, and may, like many other people, have been unconsciously biassed by a prepossession. It is impossible for any one who has not minute local knowledge to check the details of an observation as reported, but, while I cannot pretend to point out the seat of the error, I am fully persuaded that the discovery of the coins in question is not to be explained by the theory that the sculptures photographed are earlier than the reign of Kanishka, but should be interpreted in some other way.

My reasons for thus refusing to accept apparently clear external evidence of date will, I hope, be sufficiently established by the discussion of the internal evidence on which I am about to enter. For the present, it will suffice to say that Major Cole's plate refutes his text. The Sanghao sculptures belong to the same school as those of Nuttu, though they may be a little later, and they bear throughout distinct marks of the influence of Roman art of the third or fourth century. They cannot possibly be anterior to A. D. 100, no matter what coins were found above or below them.

The problem demanding solution may be conveniently stated by placing in juxtaposition and contrast the opinions expressed by the two scholars who have attacked it.

Mr. Fergusson, after giving many reasons, some strong, and some the reverse, for his opinion, came to the conclusion "that, though some of these Gándhára sculptures probably are as early as the first century of the Christian Era, the bulk of them at Jamálgiri, and more especially those at Takht-i-Bahi, are subsequent to the third and fourth [centuries], and that the series extends down to the eighth [century]; till, in fact, the time when Buddhism was obliterated in these countries."*

Sir Alexander Cunningham expresses his views as follows:—

"What I have called the Indo-Grecian style must have been introduced by the Greeks who ruled the country; but the earliest specimens, so far as can be proved, belong to the time of Azes, I saw myself twelve

* *Indian and Eastern Architecture*, p. 182.

coins of Azes exhumed from under the temple of *Maliâr-kî-mora* (Shâh-dheri), from which the Indo-Ionic capitals and bases were extracted.

The Indo-Corinthian examples should be equally old, at least all the fine examples. But the oldest that can be proved, belongs to the time of the Antonines, and is *certainly* older than Constantine."

[Here follow detailed references to the *stûpas* at Mânikyâla and elsewhere, and to the use of the Arian alphabet, which has been sufficiently discussed above.]

"I would, therefore, ascribe all the greater works, both of sculpture and architecture, to the *flourishing* period of Kushân sway under Kaushika, Huvishka, and Vasu Deva—, or from 80 to 200 A. D.

Doubtless many *stûpas* were erected after A. D. 200; but they were comparatively small, and their decorations rough and coarse."

[Reference is then made to the Sahri Bahlol image, and the Hidda and Baoti Pind topes, which will be discussed subsequently.]

"I notice that none of the sculptured head-dresses show any affinity with Sassanian costume, whereas the coins (Indo-Sassanian) show it unmistakably, from about the time of Bahrâm Gor. From this I infer that the sculptures are older than 400 A. D.

"I believe that the strong Sassanian government from A. D. 230 to 450 formed a very effectual barrier to intercourse between Rome and N.-W. India. Roman gold coins are plentiful down to the time of Severus and Caracalla [A. D. 217]. They then disappear until the time of Justin [A. D. 526], Marcian [A. D. 450], Leo [A. D. 474], and Anastasius." [A. D. 491-518].*

I am not able to agree altogether with either Mr. Fergusson or Sir A. Cunningham, and shall now proceed to state the reasons which seem to me sufficient to justify me in venturing to differ from such eminent authorities.

It will be convenient to attempt in the first place to fix possible limiting dates, and, when that has been done, to determine, so far as may be, the approximate actual dates of the sculptures. The chronological enquiry involves the determination of their aesthetic affinities.

As to the initial date there is practically no dispute. It is impossible to be certain that "the Indo-Grecian style" was really "introduced

* My quotations are from a letter dated 8th January 1889, with which Sir A. Cunningham favoured me in answer to enquiries, and which consequently, express his latest and deliberate opinion on the subject. In the Introduction to Volume V of the Archaeological Reports he had long ago expressed the same opinion as to the relation between the Kushân dynasty and the Gândhâra sculptures, but the theory which he then held as to the Kushân chronology obliged him to fix the date of the sculptures nearly a century and a half earlier than he now does.

by the Greeks who ruled the country," as Sir A. Cunningham affirms that it must have been, because, with the exception of coins, not a vestige of Bactrian art is known to exist, and we know nothing almost about the Greeks who ruled the country beyond the names of some of them.

But, whoever introduced Greek art into India, so far as our present knowledge extends, the Taxilan Ionic temples are certainly our oldest specimens of Indo-Greek architecture, and the statuette of Athene, in the same posture in which she is shown on the coins of Azes, is our oldest Indo-Greek sculpture from the Gándhára region. Both the temples and statuette must date approximately from the beginning of the Christian era.

It has been shown above (p. 112) that Greek art influenced Indian sculpture and architectural decoration from the time of Asoka B. C. 250, and that more or less distinct traces of its influence may be traced in the interior of India for several centuries afterwards. Greek ideas reached India by at least two routes, namely, overland through Bactria, and by sea through the ports of the western coast.

The Athene and the Taxilan Ionic pillars are, I think, to be classed among the results of this old and long-continued Hellenistic influence.

The bases of the Ionic pillars at Taxila, according to the measurements of their discoverer, correspond exactly with the pure Attic model, as seen in the Erechtheum. "The capitals differ from the usual Greek forms very considerably, and more especially in the extreme height of the abacus. The volutes also differ, but they present the same side views of a baluster, which is common to all the Greek forms of the Ionic order."* In other words, the pillars, though with peculiarities of their own, are Greek, not Roman. The Roman modification of the Ionic order was characterized by corner volutes.

At the beginning of the Christian era Roman art, as will be explained presently, had not affected India, and the fact that the Taxilan Ionic pillars are Greek, not Roman, in style, harmonizes perfectly with the numismatic evidence that they were erected soon after B. C. 30.

So far, then, as the Athene and the Ionic pillars are concerned, it must be admitted that the Gándhára sculptures go back to the beginning of the Christian era, and A. D. 1 may be taken as the anterior limiting date. Nothing older is known in the Gándhára region. I shall endeavour to prove subsequently that nothing else which has been found there is nearly so old.

I shall now try to fix the posterior limiting date, which Mr. Fergus-

* *Archæol. Rep.* Vol. V, p. 71, Pl. XVIII.

son places in the eighth century, and Sir A. Cunningham at the beginning of the fifth.

The extension of the Græco-Buddhist series of sculptures down to the eighth century A. D. by Mr. Fergusson was suggested by the published accounts of the opening of the great tope at Mánikyála many years ago by General Ventura.

The undisturbed deposit which was found in the lower portion of that building included coins of Kanishka and Hrvishka, and none later, and is legitimately interpreted as signifying that the structure in its original form cannot be older than A. D. 110, nor much later than A. D. 150.

The upper deposits, about the exact position of which there is some doubt, contained various coins ranging in date from A. D. 632 to about A. D. 730, and undoubtedly show that the top of the building must have been opened in the eighth century, and a deposit then made. But they prove nothing more.

We are altogether ignorant of the circumstances under which these upper deposits were made, and it is very unsafe to build any historical theories on their existence. The great tope at Mánikyála is adorned with Indo-Corinthian pilasters, the existing capitals of which are executed in *kankar*, or nodular limestone. Sir A. Cunningham supposes that all the original work of the tope was in sandstone, and that the *kankar* mouldings date from the eighth century.* No other example of Indo-Corinthian work of that date is known, and, if the existing capitals were executed in the eighth century, I feel certain that they were mere restorations. As a matter of fact their date is quite uncertain. The attempt to connect the coin of Yaśo Varma, A. D. 730, which was found in the upper deposit, with supposed repairs of the tope in the eighth century is purely conjectural.† All we really know is that somebody for some reason unknown opened the building at the top and put in a coin of Yaśo Varma. Such an adventitious supplementary deposit is no substantial basis for an argument that Buddhism and Indo-Hellenic art still flourished in the Gándhára region in the eighth century, and, except Yaśo Varma's coin, no evidence whatever, so far as I am aware, exists to support the inference that the Gándhára school of art continued to exist so late as the eighth century.

In another place, Mr. Fergusson, still relying on the same poor little coin, has given an unwarrantable extension to the duration

* The great Mánikyála tope is discussed by Cunningham at considerable length in *Archæol. Rep.*, Vol. II, p. 139, and Vol. V, pp. 76-78.

† [It is more probable that the coin is of the 6th century, of a Yaśo Varman about 532 A. D. This would admirably fit in with "the limiting date" given on p. 153. See *Proceedings* for August 1888. Ed.]

of Buddhism as a dominant faith in Gándhára. "There were," he writes, "probably no great Buddhist establishments in Gándhára before Kanishka, and as few, if any, after Yáso Varma, yet we learn that between these dates [*i. e.* circa A. D. 78 to 730], this province was as essentially Buddhist as any part of India.*

In support of the last clause of this sentence the Chinese travellers Fa Hiau and Hiuen Tsiang are appealed to, but their testimony does not support the conclusion drawn from it. After the middle of the seventh century, when Hiuen Tsiang wrote, very few parts of India were "essentially Buddhist," and Gándhára certainly was not. In A. D. 730 very little Buddhism can have been left in it.

Mr. Fergusson's language is correct when it is confined to the beginning of the fifth century. Fa Hian who travelled in India in the years A. D. 400—405, found Buddhism vigorous and flourishing in Gándhára, as in a large part of India. But, at the time of the travels of Hiuen Tsiang, A. D. 629—642, a very great change had taken place, and Gándhára was very far from being "essentially Buddhist."

The capital city of Gándhára, the modern Pesháwar, is, he notes "about 40 *li* [= 6 to 7 miles] in circuit. The royal family is extinct, and the kingdom is governed by deputies from Kapisa [N. of Kábul]. The town and villages are deserted, and there are but few inhabitants.

At one corner of the royal residence there are about 1,000 families * * * There are about 1,000 *sanghárímas* [monasteries], which are deserted and in ruins. They are filled with wild shrubs, and solitary to the last degree. The *stúpas* are mostly decayed. The heretical temples, to the number of about 100, are occupied pell-mell by heretics."

At Pushkalávátí, the modern Hashtnagar, the pilgrim found a large population, but not of the congregation of the faithful, for the Buddhist buildings, like those of the capital, were in ruins.

Taxila, east of the Indus, was dependent on Káshmir, the royal family here also being extinct. The monasteries are described as "ruinous and deserted, and there are very few priests; those that there are, study the Great Vehicle."†

The graphic and emphatic words of Hiuen Tsiang prove with absolute certainty that at the time of his visits (A. D. 629—642) the Buddhist religion in Gándhára was nearly extinct. The utter decay of which he gives such clear testimony must have been in progress for a considerable time. It is not possible that the Buddhist edifices of Pesháwar could have become "deserted and in ruins, filled with wild shrubs, and solitary to the last degree" in a day.

* *History of Indian and Eastern Architecture*, p. 76.

† Boal, *Buddhist Records of the Western World*, Vol. I, pp. 100, 109, 137.

It is quite safe to assume that Buddhism had ceased to be an active force in the Gándhára region, including Taxila, by the year A. D. 600; and it is inconceivable that new religious edifices on any considerable scale should have been erected, or works of art deserving of the name, executed in that region subsequent to that date by the scattered, poverty-stricken, and necessarily dispirited adherents of a decaying religion.

It follows, therefore, that the series of Græco-Buddhist works in Gándhára does not extend, as Mr. Fergnsson supposed, to the eighth century, but, on the contrary, was closed by the end of the sixth century.

As a matter of fact, the closing date must, I believe, be pushed back considerably farther, but in any case, A. D. 600 *must be taken as the extreme possible limiting posterior date for any work of the Gándhára school in the Lower Kábul Valley*. The dates of which we are in search lie, therefore, between A. D. 1 and A. D. 600.

The above argument, based on the testimony of Hiuen Tsiang, appears to me unanswerable, but it may be well to supplement it by other arguments, in themselves of less force, which reduce the closing date to still narrower bounds. I have already quoted Sir A. Cunningham's remark that the head dresses of the Gándhára sculptures show no affinity with the Sassanian costume, and that the sculptures may therefore be regarded as prior, not only to A. D. 600, but to A. D. 400.

Another observation of Sir A. Cunningham's leads to nearly the same conclusion. He observes that "all, or nearly all, Buddhist building must have been stopped after the occupation of Pesháwar by Kitolo's son in the latter part of the fifth century." The Chinese account show that "the last king of the Yuchi [Yueh-ti] mentioned in history is Kitolo, who took possession of Gándhára, but was obliged to return to the west to oppose the white Huns, leaving his son in charge of the new province. The son established his capital in Fo-lu-she, or Parsháwár [Pesháwar]; and the name of the founder of the Little Yuchi, as they were afterwards called, still survives in the title of Sháh Kator, the Chief of Chitrál."*

The coins of the kings of the Little Yuchi are described as bearing Saiva emblems,† and the kings themselves, therefore, were presumably Brahmanists. It is going too far to assume with Sir A. Cunningham that the rule of a Saiva king must necessarily have put a stop to all, or nearly all, Buddhist buildings, but it must certainly have been un-

* My first quotation is from a private letter. The second is from *Archæol. Rep.*, Vol. II, p. 63. I have not verified the reference to Chinese authors, which is not given in detail.

† *Archæol. Rep.*, Vol. V, p. 7. I have not seen any of these coins.

favourable to their erection. In another place Sir A. Cunningham speaks of "the first persecution of Buddhism by the Śaiva kings of the Little Yuchi,"* but I do not know what evidence exists for this alleged persecution. Whatever may have been the precise attitude of the Little Yuchi kings towards Buddhism, it is certain that the latter years of the fifth century were times of conflict and turmoil throughout Northern India. The Bhitari pillar inscription records the struggles between the Gupta dynasty and the Huns (Hūnas), and in or about A. D. 480, on the death of Skanda Gupta, the Gupta empire broke up.† A few years later the stormy career of the Hūna chief Mihirakula disturbed the whole of Northern India from Bengal to Káshmir.‡ In such a period of anarchy and confused struggles for dominion the arts of peace are perforce neglected, and it would be strange indeed if Gándhára in those days was the scene of the peaceful development of a considerable school of sculpture, as Mr. Fergusson supposed it to have been.

I doubt also if the Græco-Roman impulse retained any considerable force after A. D. 450, even on the north-west frontier. By that time it had certainly spent itself in India Proper, both in the North and West. The last faint traces of Greek skill in design are observable in the Gupta gold coinage of Chandra Gupta II, which was minted in Northern India about A. D. 400,—the later Hindú coinage is all barbarous in style. Corrupt and unmeaning Greek letters linger on the silver coins of Kumára Gupta and Skanda Gupta struck in Western India up to about A. D. 480, but the fact that these letters are corrupt and unmeaning shows that Hellenistic culture had then dwindled down to a dead tradition, even in Gujarát, which had been for centuries in communication with Alexandria and Rome.

In short, all that is known of early Indian history indicates the great improbability of the existence of a flourishing Hellenistic school of sculpture on the north-west frontier later than A. D. 450.

Before proceeding to the discussion of the artistic relations of the Gándhára sculptures, which will render the chronology more definite, one other piece of external evidence may be cited to prove that the good sculptures are much earlier than A. D. 600.

* *Archæol. Rep.*, Vol V, p. 42.

† [See, however, on the dissolution of the Gupta empire, the paper 'On an Inscribed seal of Kumára Gupta, ante, p. 85. Ed.]

‡ For the history of the Gupta period see Mr. Fleet's work on the Gupta inscriptions, Vol. III. of the *Corpus Inscriptionum Indicarum*. I have given a very brief outline of it in my essay on the Gupta Coinage in the *Journal Royal Asiatic Society* for January 1889, to which reference may be made for the proof of the remarks in the next paragraph.

A statuette, Indo-Greek or Indo-Roman in style, wanting the hands and feet, was discovered by Dr. Bellew in the Gándhára country, carefully enclosed in a sepulchral chamber at the level of the ground in the centre of a *stúpa*. The statuette represents the standing Buddha, and is characterized by Dr. Bellew as "better carved than the generality of figures met with," and by Sir A. Cunningham as "fine."*

The style of the statuette shows that it was executed during the flourishing period of the Gándhára school, and its mutilated condition proves that it was already old when deposited in the *stúpa*. The form of that building indicates that it was created not later than A. D. 600, nor much earlier than A. D. 500.

It is thus evident, remarks Sir A. Cunningham, that the statuette was utilized at a time "when the zeal of first converts had long since died away, and the growing indifference of the people no longer required the manufacture of new statues. Under such circumstances, I can readily suppose that the builders of the *tope* may have deposited any piece of Buddhist sculpture that came to hand, just as Bráhmans at the present day will set up and worship any statue which may be found, caring little for its state of mutilation, and still less for its possible connexion with Jainism or Buddhism."

This curious discovery thus confirms the evidence already adduced to prove the propositions that the *tope* A. D. 500—600 was one of decay for Buddhism in Gándhára, that few new religious edifices were erected during that period, though their construction did not altogether cease, and that the vigorous, local school of Indo-Hellenic art belongs to an earlier time.

My contention that the history of the Gándhára school of Indo-Hellenic art, consecrated to the service of Buddhism, was practically at an end by A. D. 450, may be met by the observation that Buddhist monuments of later date are known to exist in the upper Kábul Valley and elsewhere in the neighbouring countries.

One of the latest *stúpas*, to which a date at all definite can be assigned, is that known as No. 10, at Hidda near Jalálábád. This building contained a deposit of coins consisting of five gold *solidi* of the Byzantine emperors Theodosius, Marcian and Leo (A. D. 407—474), two very debased imitations of the Indo-Scythian coinage, which may be assigned to the sixth century, and no less than 202 Sassanian coins of various reigns, but all agreeing in the absence of any trace of Muhammadan influence.

Masson and Wilson, arguing from these facts, reasonably came to

* Cunningham, *Descriptive List*, No. 165; and *Archæol. Rep.* Vol. V, p. 42. with quotations from Dr. Bellew's Report on Yúsufzai, the original of which I have not seen.

the conclusion that the *stúpa* must have been constructed between the years A. D. 474 and 690, at which latter date the Muhammadan incursions had begun, and Kábul was governed by Bráhmaṇ kings.*

The Sassaniau coins indicate that the monument was erected about A. D. 600.

A *stúpa* belonging to approximately the same period, with an undisturbed deposit of coins, was opened by Sir A. Cunningham at Baoti Pind in the Ráwal-Pindi District, east of the Indus.†

No *stúpa* of later date than those at Hidda and Baoti Pind is, I believe, known either in Afghánistán or the Panjáb, though I should be sorry to affirm that none such exist.

These examples prove, as we had already learned from Hiun Tsiang, that Buddhism, though sadly weakened at the beginning of the seventh century, was still alive, and show, which was hardly to be expected, that occasionally persons could still be found willing to spend much time and money on works dedicated to the religion of Buddha.

But these examples prove nothing in favour of the late continuance of the Gándhára school of sculpture.

I do not think that any Indo-Hellonic sculpture was found associated with the ruins of the Baoti Pind *stúpa*. The published information concerning the architectural and sculptured decorations of the *stúpas* near Jalálábád is very meagre. So far as it goes, it indicates that, whatever may be the reason of the difference, the monuments in the upper Kábul valley do not display such manifest traces of Græco-Roman influence as do those situate in the lower Kábul valley or Gándhára. Wilson speaks more than once of "plain mouldings" on the pilasters, and does not, I think, note any example of the Indo-Corinthian capital among the ruins of the Jalálábád topes. The date of these topes has, consequently, little bearing on the question concerning the chronology of the Gándhára sculptures.

It is probable that these sculptures are the work of a special local school, working on the lines of Roman art under the patronage of the sovereigns who resided at the city now known as Pesháwar. It seems clear that the head quarters of the school were at Pesháwar, and that the special modification of Roman art, worked out by the artists of that city, never spread beyond the bounds of a comparatively small region in the vicinity of the capital. The connection between the Pesháwar school and the architects and sculptors of interior India was, I believe, very slight, if it existed at all.

I have ventured to assert positively that the Gándhára or Pesháwar

* *Ariana Antiqua*, pp. 44, 110, Pl. XVI, XVIII.

† *Archæol. Rep.*, Vol. II, p. 141.

local school of sculpture followed the lines of Roman art, and is not the direct descendant of pure Greek art. This proposition of course is to be taken strictly as applying only to the Pesháwar school. It does not apply to the case of the Ionic pillars at Taxila, nor to the sculptures at Buddha Gayá or Bhárhut. The Sánchi work too is probably free from Roman influence, and I cannot perceive any very clear traces of such influence at Amarávatí, though I am not certain that it is altogether absent. The art work in some of the caves in Western India, on the other hand, was in all probability influenced by the specially Roman developments of Greek art.

I pass by on the present occasion the wider questions suggested by an examination of the entire field of early Indian art, and confine myself to the discussion of the nature and degree of Roman influence on the local Gándhára or Pesháwar school of sculpture, which is specially characterized by the use for decorative purposes of the Indo-Corinthian capital.

A brief outline of some of the most material facts in the history of the intercourse between Rome and India will help my readers to appreciate more accurately the value of comparisons between Indian and Roman works, and to understand the bearing of such comparisons on the chronology of the Gándhára school.

Roman influence was not felt by India until after the establishment of the empire of the Cæsars, and the subjugation of Egypt by Augustus; and even during the reign of Augustus, the maritime commerce between Rome and India appears to have been conducted by Arab ships.

The discovery or re-discovery of the course of the monsoon by Hippalos, about the middle of the first century A. D., first rendered it possible for Roman ships to reach the Indian shores.

The overland trade between India and the Roman empire appears to have first attained large dimensions at about the same time. Pliny, who died A. D. 79, laments, in a well-known and often quoted passage, the heavy drain of gold from the capital towards the east, and his evidence is confirmed by the large number of coins of the early Roman empire which have been found in India.

The overthrow of the Nabatæan kingdom of Petra in A. D. 105 secured for Palymra the commercial preeminence on the principal land route between the Roman empire on one side and India and China on the other, and that city retained the preeminence thus gained until it was sacked by Aurelian in A. D. 273. Palymra was visited by the emperor Hadrian about the year A. D. 130, and about A. D. 200, in the reign either of Septimus Severus, or of his son Caracalla, was made a Roman colony.

Active communication between the Roman empire and the far east was maintained during the third century, not only by the peaceful methods of commerce, but by the frequent oriental expeditions of the emperors. The disastrous war of Valerian with the king of Persia, A. D. 254—260, brought the armies of Rome into almost direct contact with India.

The period of Palmyra's commercial greatness, A. D. 105—273, coincided with the period of Roman military activity in the east, and in part with the prosperity of Alexandria, the emporium of the Indian sea-borne trade. This period, accordingly, is that during which Roman intercourse with India attained its maximum. "It was during the reigns of Severus [A. D. 194—211], his son Caracalla [A. D. 211—217], and the Pseudo-Antonines that Alexandria and Palmyra were most prosperous, and that Roman intercourse with India attained its height. The Roman literature gave more of its attention to Indian matters, and did not, as of old, confine itself to quotations from the historians of Alexander, or the narratives of the Selencidan ambassadors, but drew its information from other and independent sources."

The existence of such independent sources of information is apparent from the works of Clemens Alexandrinus, (who mentions Buddha and *stûpas*), Philostratus, Ælian, and other writers.*

It so happened that at the date, A. D. 273, of the cruel destruction of Palmyra, Alexandria too had fallen into comparative decay. "It would," of course, as Priaulx observes, "be absurd to suppose that the destruction of Palmyra, however much it affected, put an end to the Indian trade through the Persian Gulf." The trade continued, and part of it passed for a time to Batûé near the Euphrates, a day's journey from Edessa.† But the Indo-Roman trade, though not stopped, was necessarily very much diminished in volume by the destruction of its overland, and the decay of its maritime emporium, and the intercourse between Rome and the far east became much more difficult and intermittent than it had been for about two centuries previously.

The Alexandrian trade about this time seems to have been abandoned by Roman ships, and to have depended on Arab vessels, as in the days of Augustus. In the reign of Constantine (A. D. 306—337) commerce with the east revived, but the Roman ships seem to have rarely, if ever, ventured, beyond the Arabian Gulf of the Red Sea.

* Priaulx, *Apollonius of Tyana and Indian Embassies to Rome*, pp. 132, *seqq.* My remarks on the course of Roman trade with India are chiefly drawn from this valuable little book and Prof. Robertson Smith's article on Palmyra, in the ninth edition of the *Encyclopædia Britannica*.

† Priaulx, *Apollonius of Tyana*, etc., pp. 178, 233.

The known facts of the external relations between the Roman empire and India, therefore, apart from all æsthetic criticism, suggest that, if Indian art was influenced by Roman art, the influence would have been most active during the period which may be defined, in round numbers, as extending from A. D. 100 to 350. It would hardly be reasonable to expect that the partial interruption of intercourse between A. D. 273 and 306 should be traceable in Indian art history, and it is not traceable.

I have named A. D. 100 as the approximate earliest possible anterior limit for Roman influence on Indian art, but, as a matter of fact, that date is too early. The name of Rome must of course have been long known to a greater or less extent in India, but I doubt if the Oriental would know much about the Roman empire, before the reign of Hadrian (A. D. 117—138), whose expeditions to Syria (*circa* A. D. 130), and passion for building great edifices must have spread the fame of his power among the merchants of the east. I consider it improbable that Roman models could have affected Indian art before A. D. 150. On the other hand, Roman influence continued to be felt by the arts of India after A. D. 350, and may not have completely disappeared for a century later.

The ground has now been cleared for an examination in some detail of the Roman elements in the art of the Gándhára or Pesháwar school. The general aspect of the figure sculptures and architectural decorations of that school is, as Mr. Fergusson perceived, distinctly Roman, but a vague assertion to that effect cannot convince anybody who has not acquired some familiarity with the art both of Rome and Gándhára. Detailed proofs are necessary to carry conviction to the mind of the ordinary reader. I shall now proceed to give some.

“Roman architecture, as we know it, dates only from about the Christian era, and the rapidity with which it spread from that time is something marvellous. Through nearly the whole extent of the Roman empire, through Asia Minor, Sicily, Britain, France, Syria, Africa,—with one great exception, Egypt,—all was Roman in moulding, ornament, details, the very stylo of carving, and the construction. No matter what the country of the architect, all seem to have lost their nationality when the Roman came, and to have adopted implicitly his system of design and decoration.....”

“It is not uncommon to find examples of Roman architecture completely overdone with ornament, every moulding carved, and every straight surface, whether vertical or horizontal, sculptured with foliage or characteristic subjects in relief.”*

* Lewis and Street, article Architecture in Encyclopædia Britannica, 9th edition, pp. 418, 421.

To the list of countries above enumerated as having adopted the Roman system of design and decoration, the Lower Kábul Valley, though it never formed part of the Roman empire, must be added.

So far as I understand the published plans and elevations, the Gándbára buildings show little Roman influence in their construction, though I should not venture to affirm that careful study might not reveal the existence of Roman elements in their plan and construction. However this may be, these buildings, like those of the provinces of the empire, were "Roman in moulding, ornament, details, and the very style of carving," and were characterized, like better known examples of Roman work, by excess of ornament, and by the lavish use for decorative purposes of crowded realistic compositions in high and low relief.

Almost every frieze or panel from Gándbára is decorated with florid Corinthian pilasters, and numerous fragments of similar Corinthian capitals belonging to structural pillars have been found. No one can give the most cursory glance at a collection of Gándhára sculptures without being struck by the free employment of the Corinthian capital as an ornament. No other Græco-Roman form of capital is used, though for a time the Indo-Persian form continued to dispute the field with its newly introduced rival.

Such extensive and exclusive use of the Corinthian form of pillar is in itself decisive proof that the school characterized by it was dominated by Roman influence, and was not a direct descendant of Greek art.

The case of Palmyra offers an exact parallel to what we see in Gándbára. "It is remarkable," observes Wood, "that, except four Ionic half-columns in the temple of the sun, and two in one of the mausoleums, the whole is Corinthian, richly ornamented, with some striking beauties, and some as visible faults."*

We find the same state of facts at the other great Syrian city of Baalbec, or Heliopolis, "which, so far as it has been known to modern travellers, is a Roman city of the second century A. D. The Corinthian order of architecture—the favourite order of the Romans—prevails with few exceptions in its edifices. A Doric column, the supposed clepsydra, is, indeed, mentioned by Wood and Dawkins, and the Ionic style is found in the interior of the circular templo;" but all else is Corinthian.

The style of the great temples at Palmyra is later and more debased than that of the corresponding edifices at Baalbec. No building of importance was erected at Palmyra after the sack of the city by Aurelian in A. D. 273, and the temples may be referred to the third century A. D.,

* Wood, *Palmyra*, p. 15.

having probably been erected during the reigns of Odænathus and Zenobia (A. D. 260—273.)

During the period A. D. 105—273 Palmyra was the principal depôt of the overland trade between India and the west, and the caravans which were constantly passing and re-passing through it must have affected some exchange of ideas as well as of more material wares. It is, therefore, reasonable to believe that the example of Palmyra was one of the factors which influenced the Gándhára architects and sculptors in their adoption of the universally diffused Corinthian style.*

The peculiarities of the Indo-Corinthian pillars have been briefly described in a previous page (pp. 117, 118).

Sir A. Cunningham holds that "at least all the fine examples" of the Indo-Corinthian style, such as the capitals found at Jamálgarhí, which are the finest known, should be ascribed to the same age as the temples with Ionic pillars at Taxila.

This view appears to me altogether erroneous, and inconsistent with the observed facts. The Taxilan temples date from the beginning of the Christian era, and show no trace of the domination of Roman ideas of art.

The Indo-Corinthian remains, on the other hand, bear on their face the most obvious resemblance to Roman work, and must consequently be later than the time when India and Rome came into contact. On historical grounds I have fixed the approximate date at which Roman forms of architectural decoration reached India as not earlier than A. D. 150, and an examination of the Indo-Corinthian works fully confirms this inference drawn from the known facts of external history.

It is, I venture to affirm, impossible that a florid adaptation of the Corinthian order, such as is universally employed in the buildings of Gándhára Proper, could have attained such favour except under Roman influence.

Pure Greek examples of the Corinthian order are extremely rare, while Roman examples are numbered by thousands. The Corinthian pillar, modified so freely, that no two specimens exactly agree, was the favourite architectural decoration employed by the builders of imperial Rome, and by those of the subject provinces, who followed the fashion set at the seat of government.

I think I am perfectly accurate in asserting that Corinthian capitals, at all like those at Jamálgarhí, were not produced anywhere in the world as early as the beginning of the Christian era, whereas plenty of capitals,

* Prof Robertson Smith's articles in the Encyclopædia Britannica, 9th edition, give excellent summaries of the present state of knowledge respecting Palmyra and Baalbec.

very like these, though differing in detail, were executed in various parts of the Roman world during the third and fourth centuries.

The fact, (according to Sir A. Cunningham's measurements), that the only two Indo-Corinthian bases of columns yet discovered do not differ widely from the bases of the pillars in the Choragic monument of Lysicrates, which was erected in B. C. 334, does not render credible the supposition that capitals similar to Roman work of the Antonine period were executed at the beginning of the Christian era.

Mr. Fergusson described the Jamálgarhí capitals as being "more Greek than Roman in the character of their foliage, but more Roman than Greek in the form of their volutes and general design. Perhaps," he added, "it would be correct to say they are more Byzantine than either, but, till we have detailed drawings, and know more of their surroundings, it is difficult to give a positive opinion as to their age."*

The great critic, with the imperfect materials at his command, might have felt a difficulty in deciding whether a given specimen was to be dated from A. D. 200 or 400, but he had no difficulty in seeing the strong Roman element which exists in all the specimens. Mr. Freeman has more than once called attention to the remarkable circumstance that human figures are inserted among the acanthus foliage of the Corinthian capitals in the ruins of the Baths of Caracalla at Rome.

"The artist," he observes, "has been so far from confining himself to one prescribed pattern, either of volutes or acanthus leaves, that he has ventured to employ vigorously carved *human* or *divine figures* as parts of the enrichment of his capitals."†

Similar figures, employed just in the same way, occur in some of the Indo-Corinthian capitals from Jamálgarhí, and are described by their discoverer as follows:—

"The human figures, which are introduced in the spaces between the acanthus leaves, are all small, and do not interfere in the least degree with the treatment of the foliage. When there is only one figure, it is always that of Buddha, either sitting or standing, and, when there are three figures, the middle one is of Buddha, and the others are attendant Arhans. These figures are never obtrusive, and they are always so placed that, to my eye, they harmonize most agreeably with the surrounding and overhanging foliage."‡

* *History of Indian and Eastern Architecture*, p. 174.

† The quotation is copied from Cunningham, *Archæol. Rep.*, Vol. V, p. 193, where the original is said to be in an essay by Mr. Freeman published in Macmillan's Magazine; but no exact reference is given. Mr. Freeman alludes briefly to the subject in his separately published essays on Italian architecture.

‡ Cunningham, *Archæol. Rep.*, Vol. V, p. 193. On the same page the author makes an unfortunate slip, and places Caracalla "in the beginning of the first century

Whatever be the æsthetic merits or demerits of the practice of introducing human figures into the Corinthian capital, it was a Roman practice. No one will contend that the capitals in the Baths of Caracalla are imitations of those in the Gándhára monasteries. It follows that the Gándhára capitals are imitated either from those in the Baths of Caracalla, or others of similar design of the same period. The reign of Caracalla extended from A. D. 211 to 217; and the necessary inference is that the Jamálgarhí capitals with human figures are later than A. D. 217.

This inference as to the date of the Jamálgarhí sculptures derived from the character of the capitals is in complete accordance with the conclusions deducible from an examination of the style of the sculptures in relief.

Before quitting the topic of the Indo-Corinthian capitals, it is only just that I should complete the account of Mr. Fergusson's views as to their date. He argues that their form argues a date later than the reign of Constantine (A. D. 306—337), after which time "the design of the capitals went wild, if the expression may be used. The practice of springing arches from them, instead of supporting horizontal architraves, required a total change, and in the West it produced exactly the same effects that we find in Gándhára.* The capitals for instance, in the churches of St. Demetrius and that now known as the Eski Jouma of Jouma at Salonica, both built in the early part of the 5th century, are almost identical in design with these, and many of the churches in Asia Minor and Syria show the same 'abandon' in design, through frequently in another direction."

I have no doubt that Mr. Fergusson is right in comparing the Gándhára capitals with those of the two Syrian churches belonging to the early part of the fifth century which he names, and that a general resemblance exists between the objects compared. Such a general resemblance is quite natural, even if there be an interval of fifty or a hundred years between the Syrian and the Indian pillars. But, if Mr. Fergusson intended to suggest that the Jamálgarhí pillars were ex-

of the Christian era," and thence argues for the early date of the sculptures. Mr. Fergusson, in correcting this accidental error, allowed himself to fall into a similar one, and dated the baths of Caracalla in the reign of Constantine.

* *Indian and Eastern Architecture*, p. 178, with references to Texier and Pullan's *Byzantine Architecture*, and De Vogüé's *Syrie Centrale*. The Syrian pillars figured by De Vogüé display certainly a great 'abandon' of design, but they have no resemblance whatever to the Gándhára forms. I except, of course, the comparatively regular Corinthian capitals at Palmyra and Baalbec, which are not much dissimilar from the Gándhára varieties.

cuted subsequent to the reign of Constantine, I cannot agree with him. They belong rather to the Antonine period, and may be referred with approximate correctness to A. D. 250, the Indian development being necessarily a little later than its Roman original.

I do not know whether true structural arches, carried on Corinthian pillars, were employed in the construction of the Gándhára monasteries or not, but it is probable that they were; for the reliefs show numerous examples of arches carried on such pillars, and used as decoration.

Mr. Fergusson's hint that it would perhaps be more accurate to call the Indo-Corinthian capitals Byzantine than either Greek or Roman does not seem to me a fruitful one. The term Byzantine may, of course, be used with reference to any Roman art of the fourth century,* to which period some of the Gándhára sculptures must be referred, but it generally connotes the formal, hieratic, and long stationary style of later date. The good Gándhára works do not seem to me to be characterized by the hieratic stiffness which is the special note of Byzantine art, although some of them are closely related to works executed in the reign of Constantine; and when the school began to decay, the art of Gándhára passed, not into Byzantine formalism, but into Hindú barbarism.

When Mr. Fergusson wrote, the erroneous date which he assumed for the Amaravati rails, and the inferences which he drew from the discovery of the coin of Yaśo Varman in the great tope at Mánikyálá predisposed him to assign an unduly late date to the Gándhára school.

Mr. Fergusson rightly observed that some of the Gándhára sculptures might be mistaken for early Christian works, but he did not follow out the hint thus given, and the remark, though perfectly true, has not attracted much attention. He supported the observation by a cursory reference to the early Christian sarcophagi and ivories. I have examined the fine collection of ivories, original and casts, in the South Kensington Museum, and, while admitting that some have really an artistic relation with the Gándhára work, I venture to think that the relation is not very close.

The representation of Christ standing under a small arch, supported on fluted columns, with florid capitals of a modified Corinthian form, as seen on the front of the Brescia casket, dating from the fifth or sixth century, is undoubtedly akin to the Gándhára representations of Buddha; and the procession of Joseph and his brethren on the Ravenna chair recalls, though less vividly, some of the processional scenes of the

* Constantinople was formally consecrated as the New Rome in A. D. 330.

Indian reliefs.* But the ivories do not seem to me to be exactly contemporary with the Indian work.

The closest parallels to the Gándhára sculptures in relief are to be found among the remains of early Christian art, though not among the ivory carvings. These parallels are to be found in a place where we should hardly expect them, the Catacombs of Rome.

It would be impossible by any number of pages of mere description to bring homo to the reader's mind the reality of the likeness here asserted, but a comparison of the heliogravure plates of the Gándhára sculptures edited by Major Cole with the similar plates of the sculptures in the Catacombs in Roller's work will convince any one who takes the trouble to make it that the connection between the two, however it came to pass, is very close indeed.†

I shall merely give references to the plates in M. Roller's book which closely resemble Major Cole's.

Pl. XLII. A sarcophagus, "à demi-païen, à demi-chrétien," from the cemetery of Callixtus, and probably dating from the third century. The arrangement of the whole composition much resembles that of many of the Gándhára reliefs, and the posture of the figure of Psyche is nearly identical with that of Prajápatí in the Nativity group from the upper monastery at Nuttu, described *ante*, p. 124.

Pl. XLIV. Sarcophagus of St. Constantia, with vintage scenes and genii; 4th century.

Pl. XLV. Sarcophagus from the Basilica of St. Paul, with various scenes of the life of Christ and His disciples, sculptured in high relief; 4th century. The scenes in this composition are not separated by columns. The resemblance in general effect to some of the best Gándhára sculptures is very strong.

* Westwood, *Descriptive Catalogue of the Fictile Ivories in the South Kensington Museum* (1876), Pl. II, III. Compare the large Catalogue of Original Ivories in the same Museum by Maskell (1872), and the little hand-book by the same writer, entitled *Ivories, Ancient and Medieval*. Other references are given by Forgysson in *I. and E. Architecture*, p. 182.

† *Les Catacombes de Rome, Histoire de l'Art et des Croyances Religieuses pendant les premiers Siècles du Christianisme*, par Théophile Roller, Paris, Vve. A. Morel et Cie.; 2 vols. large folio n. d., with 100 heliogravure plates. Readers who cannot obtain access to this work or De Rossi's publications may verify the comparison made by reference to "*Roma Sotterranea, or an Account of the Roman Catacombs especially of the Cemetery of St. Callixtus*," compiled from the works of Commendatore De Rossi, with the consent of the author. New edition, rewritten and greatly enlarged, by Rev. J. Spencer Northcote, D. D., Canon of Birmingham, and Rev. W. R. Brownlow, M. A., Canon of Plymouth;" 2 volumes, 8vo., London, Longman's, Green and Co., 1879, with numerous engravings.

Pl. XLVIII. Resurrection of Lazarus, and other incidents; 4th, or possibly, 5th century. The thick, stumpy figures much resemble some of those in reliefs from Nuttu and Sanghao.

Pl. XLIX. Sarcophagus of 4th or 5th century, with a long row of worshippers.

Pl. LIV. Representation of an *agapé* feast; 5th century. The winged genii and other figures much resemble those seen in Gándhára art.

Pl. LVIII. Sarcophagus of Constantine in the Lateran Museum; 4th century. Relief sculptures with intercolumniations and architrave. Christ is seated in the centre compartment, like Buddha in the Gándhára compositions.

Pl. LIX. The celebrated sarcophagus of Junius Bassus, dated A. D. 359. Various scenes are represented in panels divided by columns. The style is very similar to that of good Gándhára work.

Pl. LX. Five sarcophagi of the 4th century; various subjects.

Pl. LXVIII. Adoration of the magi; 4th century, compare the Gándhára representation of the four kings offering the precious bowls to Buddha. One example of this is in the Lahore Museum, No. 405 of Cunningham's *Descriptive List*, and another, (or possibly the same work), is figured by Major Cole.

Pl. LXIX. The Epiphany; 4th century.

Pl. LXXVI. Elijah ascending to heaven in a four-horsed chariot; 4th, or possibly 3rd, century.

Pl. LXXXI. Sarcophagus, probably of about 5th century.

Pl. LXXXII. Sarcophagus of 5th century.

Pl. LXXXVII. Worship of the *labarum* symbol, the cross enclosed in a circle, elevated in the centre compartment of an intercolumniated relief; 5th century.

This composition has a very strong resemblance to the representation of the worship of the *Trisúl*, the emblem of the Buddhist faith, in Major Cole's volume.

It is, as I have said, impossible by means of mere verbal description to express the intimate relation which exists between the art of Gándhára, and these Christian sculptures from the Catacombs, which range in date from about A. D. 250 to 450; but it is equally impossible for any person to compare photographs of the two sets of objects, and to fail in perceiving the likeness, in some cases almost amounting to identity, of style and treatment. The evident analogy, too, between the representations of the Buddha and the Christ shows that there is a substantial identity of subject, veiled under difference of name, as well as in treatment. The facts invite speculation as to the possibility and probability

of an appreciable amount of Christian influence on the later development of Buddhism, but I cannot venture at present to embark on the tempting, though perilous, sea of conjecture to which such speculation would lead me.

I have shown above that no difficulty exists in supposing that Indian art may have been affected by the Palmyrene variety of the cosmopolitan Roman style. Inasmuch as that style was cosmopolitan, it is impossible to say that any given Indian adaptation of a Roman model was borrowed from the art of Palmyra or any other particular locality. If we find an Indian sculpture nearly identical with one at Palmyra, all that can be safely asserted is, that both have a common origin, and date from approximately the one period, while there is no reason why the Indian imitation should not have been copied directly from a Palmyrene model.

Bearing in mind these explanations, it is interesting to observe that a frieze from the upper monastery at Nuttu, reproduced in Major Cole's Plate 16, figure 1, is substantially identical with the Palmyrene frieze engraved in Wood's Plate 41.

The latter adorns a building which bears an inscription recording the execution of repairs during the reign of Diocletian (A. D. 284—305), who kept a garrison at Palmyra, but the building, and the frieze with which it is decorated, probably were erected about the middle of the third century.

The Nuttu design consists of a vine stem, knotted into five circles, forming small panels; the first of which, to the left, contains leaves only, the second is occupied by a boy or Genius plucking grapes, the third exhibits two boys playing with a goat, the fourth displays a rudely executed goat sitting up and nibbling the vine, and the fifth represents a boy plucking grapes.

At Palmyra, the figures of the boys and goats are wanting, but the design of the knotted vine is absolutely identical with that in the frieze from Nuttu, and the two works cannot be far apart in date. Somewhat similar scroll patterns are common in Roman art, and occur occasionally in other works of the Gándhára school.

The porphyry sarcophagus of St. Constantia, executed in the reign of Constantine (A. D. 306—337), to which I have already referred (*ante*, p. 165), is adorned with a relief exhibiting the pressing of grapes by winged cupids, set in scrolls of vine-stems, bearing a general resemblance to the design of the Nuttu frieze. The subsidiary garland, acanthus leaf, and animal decorations of St. Constantia's sarcophagus all have a strong likeness to the Nuttu sculptures and other works of the Gándhára school.

I venture to maintain with some confidence that I cannot be far wrong in assuming A. D. 300 as an approximate mean date for the remains of the upper monastery at Nuttu. This chronological determination is of special value because the sculptures from this site, though extremely various in subject, are probably all contemporaneous, or nearly so. The whole site occupied an area measuring only about 80 by 60 feet, and 79 objects were found within this small space. Most of these are stone sculptures, which lay round two small *stūpas*, each ten feet in diameter, that occupied the centre of the building. Fragments of plaster figures were found at a distance of a few feet from the miniature *stūpas*.*

The varied collection of sculptures obtained within this small space comprises the Nativity scene, (*ante*, p. 123), the very elegant figure of a woman standing under a conventional palm-tree, (*ante*, p. 124), a specimen of the adaptation of the Rape of Ganymede, (*ante*, p. 134), two examples of the death-bed scene or *parinirvāna*, (*ante*, p. 125), and numerous figures of Buddha associated with his disciples, the master being sometimes represented with both shoulders draped, and wearing moustaches, (*ante*, p. 127).

It seems reasonable to suppose that sculptures obtained within such a very limited area, and belonging to one school of art, cannot be very widely separated from one another in date. It is not likely that they were all executed in a single year, but, for the purposes of art history, they may be safely regarded as contemporaneous.

If then I am right in fixing A. D. 300 as the approximate date for this group of subjects, a valuable standard for the chronology of the whole school has been rendered available, and we learn that, at the date specified, all the subjects named had been adopted by Buddhist artists as proper themes for the exercise of their skill.

I cannot attempt to indicate every instance in which the art of Gándhāra appears to be an echo of that of imperial Rome, and shall quote but few more such instances. The representation of a long roll or undulated garland carried by boys is one of the commonest subjects treated in the Gándhāra friezes. A specimen is thus described by Dr. Anderson;—"G. 94, *a* to *d*.—Four portions of a frieze. Children supporting on their shoulders a long undulated garland, on which are tied bunches of grapes, and other ornaments; in the drooping folds above which, in some, appear the busts and heads of winged human figures, and, in one, a bird of prey with extended wings, while, in others, the intervals are filled with floral devices."†

* Cole, *Second Report*, p. cxxiii, Pl. G (plan and elevation).

† Anderson's *Catalogue*, Part I, p. 241. Cf. Cole's heliogravure plate 7, figures 2, 3.

Numerous illustrations might be quoted in proof of the proposition that designs of this class are Roman in origin, but I shall content myself with referring to one, a frieze found in the Palestrina territory, probably dating from the time of Constantine, which represents a very large garland carried by boys.*

The same subject occurs repeatedly in the sculptures of Amarávati, though treated in more Indian style. A notable distinction between the methods of treatment in Gándhára and at Amarávati is that the Gándhára artists always give the roll an imbricated surface, such as is commonly seen in Roman art, whereas the Amarávati sculptors mark the surface with lines in a manner of their own. But I suspect that at Amarávati, as well as in Gándhára, the motive was borrowed from Roman art.

The Buddhist artists, following the usual Indian practice, converted the foreign motive to the purposes of their own ceremonial, and, as Sir A. Cunningham has pointed out, used the Roman garland to represent the light serpentine frame of bamboo covered with tinsel, which was carried in procession at Buddhist festivals, as it is to this day in Burma.

I have already referred to the fact that the conventional representation of the *parinirvána* or death-bed of Buddha is borrowed from the sculptures of Roman sarcophagi or Græco-Roman sepulchral reliefs (*ante*, p. 126).

I have also mentioned (*ante*, p. 136) that the representations of winged animals, and marine monsters, and the comic friezes of boys riding on lions and other beasts, so common in the early Buddhist sculptures both of Gándhára and India Proper, are ultimately derived from the works of the Alexandrian schools of Greek art, which are supposed to trace their parentage to Scopas.

The early examples of this class of subjects which occur in the interior of India, and are prior in date to the establishment of the Roman empire, must be imitations of Greek models. In all probability the artists of Buddha Gayá and Bhárhut obtained their knowledge of these foreign forms by means of the sea commerce conducted with Alexandria through the inland depot of Ozene (Ujjain), and the port of Barygaza (Bharoch).† At Amarávati it is possible that the channel of communication was Roman.

The Gándhára compositions dealing with similar subjects should be compared, not with Greek art, but with the representations of the

* Visconti, *Museo Pio-Clementino*, Vol. VII, pl. XXXV.

† See the Introduction to McCrindle's translation of the Periplus of the Erythrean Sea.

Triumph of Bacchus, and of processions of the Genii Bacchici and Genii Circenses, many examples of which may be seen in Visconti's plates, and in other illustrated works on Roman art.

It is not easy to determine the chronological sequence of the various remains in the Yúsufzai country.

"The principal groups of ruins," remarks Sir A. Cunningham, "are at Sháhábázgarhi, Sáwaldher, and Sahri Bahlol in the plain; and at Ránúgat, Jamálgarhi, Takht-i-Bahi, and Kharkai in the hills. There are similar remains at many other places, as at Topi, Ohind, and Zeda in Utmanzai; at Túrli, Baksháli, and Gharyáli in Súdám; and at Matta and Sanghao in Lúnkhor."*

To this list must be added the ruins of the monasteries at Mián Khán and Nuttu, which lie close to those at Sanghao, and were explored by Major Cole.

The buildings and sculptures of Jamálgarhi were the first described, and are the best known. It is very unfortunate that no accurate record has been kept in many cases of the exact site where certain sculptures were found, and the consequent uncertainty greatly hinders satisfactory discussion. But it is certain that by far the largest proportion of the specimens of Gándhára art in the Indian Museum at Calcutta came from Jamálgarhi, and that some of the best specimens in the British Museum came from the same locality. The Gándhára school was in its prime when the Jamálgarhi sculptures were executed. I have shown (*ante*, p. 163) that the Indo-Coriuthian capitals found there are later than A. D. 217. So far as I can see at present, the Jamálgarhi remains do not vary much in style, and their execution cannot be extended over a very long period. The best may be dated A. D. 250, and the latest A. D. 300. Of course, all such dates must be regarded as mere approximations in round numbers.

I have adduced (*ante*, p. 168) reasons for believing that the sculptures from the upper monastery at Nuttu are slightly later, dating from about A. D. 300. Those from the lower monastery at the same site belong to the same period.

The Sanghao sculptures, which are fully illustrated by Major Cole, are in general contemporaneous with those at Nuttu, but some of the Sanghao works look a little later.

Many of the sculptures from Mián Khán, which are illustrated by Major Cole's heliogravures Nos. 23 to 30 inclusive, seem to me superior in execution to, and more Greek in style than, those from other sites. But very little difference can be discerned between the work at

* *Archæol. Rep.*, Vol. V, p. 5.

Mián Khán and the best at Jamálgarhí. Some of the Mián Khán specimens may be as old as A. D. 200, though none, I should think, are older.

As to Kharkai no detailed information is available. Sir A. Cunningham merely notes that he saw a large collection of sculptures from this locality in the possession of Mr. Beckett, and that he obtained a considerable number himself "similar in all respects to the sculptures that have been dug up at other places."* Inasmuch as Sir A. Cunningham's criticisms are chiefly concerned with the objects obtained at Jamálgarhí, it may be assumed that the Kharkai sculptures are not remote in date from those procured at that locality.

"The remains at Sáwaldher, $2\frac{1}{2}$ miles to the east of Jamálgarhí, are mostly covered by the houses of the village, and are, therefore, inaccessible. It is believed, however, that some of the finest specimens in the Lahore Museum were obtained at this place by Dr. Bellew."† If this belief be correct, the Sáwaldher ruins must be as old as those at Mián Khán, and it is possible that some of the buildings may have been older, and contained works tracing their parentage directly to Greek art. It is a great pity that the objects in the Lahore Museum were not properly labelled.

The excavations at Sahri Bahlol proved that the site had been occupied in very ancient times, perhaps as early as B. C. 2,000,‡ and the existence of the *stúpas*, containing the broken statue imbedded in it, proves that Buddhist votaries occupied the place as late as A. D. 500 or 600 (A. D. *ante*, p. 155). The broken statue was particularly well executed, and presumably may be referred to the third century.

The information respecting the sculpture at Takht-i-Bahí is very scanty. Mr. Fergusson, from examination of photographs, judged that the remains at this place are of considerably later date than those at Jamálgarhí, and his judgment on a question of relative date is entitled to the greatest respect.

At Takht-i-Bahí, a court was excavated, surrounded on three sides by lofty chapels, each of which seems to have enshrined a colossal plaster statue of Buddha, some twenty feet, or more, in height. Such colossal plaster images do not appear to belong to a very early stage of Buddhist art, and their presence confirms Mr. Fergusson's suggestion that the remains at Takht-i-Bahí should be placed late in the series. Perhaps A. D. 400 to 450 may be assigned as a tentative date.

To sum up, I accept the numismatic evidence, agreeing as it

* *Archæol. Rep.*, Vol. V, p. 54.

† *Ibid.*, *ibid.*

‡ *Ibid.*, p. 38.

does with the architectural, that the Ionic pillars found in two temples at Taxila, east of the Indus, date from about the beginning of the Christian era, and are, with the exception of a very few sculptures of the same period, the earliest known examples of Indo-Hellenic work in the Panjáb. These pillars I regard as results of the operation of Hellenistic, as distinguished from Roman, influence. Hellenistic ideas can also be traced in the early Buddhist sculptures, which were executed prior to the establishment of the empire of the Cæsars, at Bhárhut, Buddha Gayá, and other places in the interior of India.

The sculptures from the Yásufzai country, the kingdom of Gándhára properly so called, which lies west of the Indus, in the immediate neighbourhood of Pesháwar, are, I believe, the work of a local school, probably founded by a foreign colony, which drew its inspiration directly from Roman, and only remotely from Greek art. This local school may be conveniently designated either as the Gándhára or Pesháwar school. The name Græco-Buddhist proposed by Dr. Leitner cannot be asserted to be incorrect, all Roman being only a modification of Greek art, but the term Romano-Buddhist would be much more appropriate.

I cannot say what circumstances caused the establishment at Pesháwar of this peculiar local school, but I do not agree with Sir A. Cunningham in associating it with Kanishka and his immediate successors of the Kushán dynasty, A. D. 80 to 200. On the contrary, I am of opinion that the earliest works of the Romano-Buddhist school of Pesháwar date from about A. D. 200, and that all the sculptures of any considerable degree of artistic merit were executed between that date and A. D. 350. The style probably lingered in decay as late as A. D. 450, but not later.

It follows that I hold that there is a wide interval, at present unbridged, between the scanty remains of early Indo-Hellenic work in the Panjáb, and the abundant specimens of later Indo-Roman work.

The style of the Romano-Buddhist sculpture and architectural decoration shows some affinity with the style of the great temples at Palmyra and Baalbec, belonging to the second and third centuries A. D., but its closest relationship, (and the connection is very close indeed), is with the Roman Christian sculpture of the period A. D. 250-450, as seen in the catacombs.

I am well aware that the opinions above expressed are open to dispute, and that I am liable to be thought over-venturesome for expressing them in such positive language. They are, however, the result of a careful and prolonged study of the subject, and I submit them for discussion in the confidence that a distinct expression of definite opinions will bring out clearly the issues to be decided, and prepare the way for final judgment.

Section VI. THE INDIAN SCHOOLS OF PAINTING.

The mention of an Indian school of painting must seem absurd to a reader acquainted only with modern India, where no trace of the existence of pictorial art can be discerned, unless the pretty, though conventional, miniatures which a few craftsmen at Delhi are still able to execute, be counted as an exception.

The paintings exhibited in the show rooms of Rajas' palaces, and the decorations of modern temples and private houses are scarcely more deserving of the name of art than the caricatures scribbled by boys on the wall of their schoolroom. In the India of to-day painting and sculpture are both lost arts. The little feeling for beauty that survives is almost confined to small bodies of skilled artisans, and is with them rather the inherited aptitude of the members of a guild for the work of their trade, than a genuine artistic taste. This statement may seem very shocking to the amiable gentlemen who, of late years, have bestowed unmeasured praise upon the æsthetic merits of Indian carpets, shawls, vases, and so forth, but 'tis true 'tis pity, and pity 'tis 'tis true.

My concern, however, is with the past rather than the present, and I must not tilt against South Kensington windmills. Whatever be the merits of modern productions, ancient India certainly produced paintings which deserve to be ranked as works of art. They do not, I believe, deserve a very high rank, when compared with the world's masterpieces—no Indian art work does—but they are entitled to a respectable place among the second or third class. The utter inability of the modern Hindú to express anything human or divine with either brush or chisel produces in the mind of the European observer in India a feeling of surprise when he finds a sculpture or painting which can be described as the work of an artist, and admits of comparison with the productions of Europe, and inclines him to exaggerate the merit of his treasure trove. The Gándhára or Pesháwar sculptures, which have formed the principal subject of this paper, would be admitted by most persons competent to form an opinion, to be the best specimens of the plastic art ever known to exist in India. Yet even these are only echoes of the second rate Roman art of the third and fourth centuries. In the elaboration of minute, intricate, and often extremely pretty, ornamentation on stone, it is true, the Indian artists are second to none. The stone-cutters in Gándhára and at Amarávatí display the same skill in drawing elaborate patterns, and the same skill in executing them, which we now admire in the work of the modern carpet-weavers and vase-makers. But in the expression of human passions and emotions Indian art has completely failed, except during the time when it was held in Græco-Roman leading strings, and it has scarcely at any time essayed an attempt to give visible form to any divine ideal.

Such being the deficiencies of Indian sculpture, the same may be looked for in Indian painting.

The sculptures of Gándhára, Amarávati, and the Western Caves frequently show traces of paint, from which it appears that the Indians adopted the common Greek practice of using colour to heighten the effect of sculpture. No Indian coloured sculpture, however, has sufficiently retained the pigment to allow modern critics to judge of the effect produced. In Gándhára the gilder's art was freely employed, in addition to that of the painter, in order to add to the magnificence of sculpture. Such extraneous aids, whether employed by Greeks or Indians, seem to our modern taste derogatory rather than helpful to the dignity of sculpture, and, this being so, we need not regret the loss of the pigment and gilding, which would in our eyes have vulgarized sculptures, which we can honestly admire as they stand in naked stone.

But, besides these questionable expedients, the artists of ancient India know how to supplement sculpture by the art of painting in forms recognized by all to be legitimate. Mr. Fergusson expresses the confident belief that paintings, such as are commonly called frescoes, contributed to the decoration of the Gándhára monasteries. It is very probable that his belief was well founded, but no scrap of any such painting has yet been found, and at present a Gándhára school of painting has only a hypothetical existence.

In Western India the destroying hand of time has been a little more merciful, and has spared enough of the ancient paintings to show that during the first five centuries of the Christian era India possessed artists who could paint pictures of, at least, respectable merit.

Fragments of paintings on walls and ceilings can be detected in the cave temples of the Bombay Presidency at several sites, but the only localities where intelligible pictures have survived, so far as is known at present, are Ajanṭá in the Nizam's dominions and Bâgh in the district of Râth in the south of Málwá. The paintings at the latter place are known only from brief descriptions in Messrs. Fergusson and Burgess' works, which are not sufficient to form the basis for critical discussion.*

Our knowledge of ancient Indian painting is practically restricted to the pictures on the walls and ceilings of the celebrated caves at Ajanṭá. No attempt has yet been made to discuss methodically these interesting

* *Cave Temples of India*, pp. 363-366; and *Notes on Bauddha Rock Temples of Ajanṭá*, pp. 94, 95. Recently a series of remarkable Jaiu paintings has been discovered at Tirumalai, 30 miles south of Vellore in the Madras Presidency. The paintings belong to two distinct periods, but their dates have not yet been determined. (*Proc. Govt. of Madras*, No. 803, *Public*, dated 11th June, 1887.)

paintings, or to determine definitely their place in the history of art.* I think that any qualified critic who undertakes the study of these works will find that they are well worth attentive examination, from the points of view both of the archæologist and the artist, but such qualified critic, competent to grasp alike archæological and artistic problems, has not yet come forward.

I cannot pretend to write a criticism on the Ajanṭā paintings. I have not had time to study them minutely, nor have I the technical knowledge requisite to enable me to determine their æsthetic value. But I am fully persuaded that they are to be numbered among the fruits of foreign teaching, either by Greeks, or Roman pupils of Greek masters, and, holding this opinion, I cannot omit all notice of them from an essay which aims at giving a general, though imperfect, view of the manner and degree of Græco-Roman influence on the art and other elements of the civilization of ancient India.

At Ajanṭā fragments of painting exist in thirteen caves, but the principal remains are found in seven. "The Ajanṭā pictures are not frescoes in the true acceptation of the term. The painting was executed on a coat of thin, smooth plaster, the thickness of an egg-shell, which was laid on a groundwork composed of a mixture of cowdung and pulverized trap, rice-husks being sometimes added to increase the binding properties of the mixture."†

As regards the style of the pictures Mr. Griffiths' general criticism is to the effect that there is "little attention paid to the science of art—a general crowding of figures into a subject, regard being had more to

* The most competent account of the Ajanṭā paintings yet published is that given in the second work referred to in the preceding note. The full title of the book is "No. 9, *Archæological Survey of Western India. Notes on the Baudḍha Rock-Temples of Ajanṭā, their Paintings and Sculptures, and on the Paintings of the Bīgh Caves, Modern Baudḍha Mythology, etc.* By J. Burgess, M. R. A. S., etc., Bombay, 4to.; Printed by order of Government at the Government Central Press, 1879." This work is new out of print, and sells at double its original price. It is illustrated by twenty-nine plates, uncoloured, fifteen of which are devoted to the paintings.

Four pretty good uncoloured plates illustrate Dr. Rājendralāla Mitra's paper on the paintings in Vol. XLVII (1878) of the *Journal of the Asiatic Society of Bengal*.

The architecture and sculpture of the Ajanṭā caves are discussed with great fulness in Vol. IV of the Reports of the Archæological Survey of Western India, and are there illustrated by splendid autotype plates, but the paintings are scarcely noticed in that volume.

The volume of *Notes*, the full title of which has been given above, belongs to a series of minor treatises in paper covers, issued by the Bombay Government preliminary to the publication of the costly and elaborato series of Reports.

† *Indian Antiquary*, Vol. II, p. 152.

the *truthful* rendering of a story than to a *beautiful* rendering of it:—not that they discarded beauty, but they did not make it the primary motive of representation.”*

The range of date of the Ajañtá paintings is very nearly the same as that of the Gándhára sculptures, though some of the former are earlier, and some may be a hundred years, or even more, later than any of the latter. The earliest paintings at Ajañtá, those on the side walls of Cave No. X, are referred by Mr. Burgess to the latter part of the second century A. D. To a large extent the Gándhára and Ajañtá works are certainly contemporary, and it is *primâ facie* probable that, if the sculptures echo the ideas of the art of imperial Rome, paintings of the same period should not have escaped the influence of the cosmopolitan canons of taste which then determined the forms of art. I am not prepared to prove in detail the Greek or Roman parentage of the Ajañtá paintings, but I have little doubt that critical study will prove them to be more Roman than Greek. Their realism, on which Mr. Griffiths comments, is one of the most characteristic features of the Gándhára sculptures, and is thoroughly Roman. Some of the panels, too, filled with elegant floral decorations are extremely like Roman work in appearance.

The Gándhára sculptures are so closely related to the Christian sculptures in the Catacombs of Rome, that I venture to suggest that it would be worth while to compare the paintings in the Catacombs with those in the Ajañtá caves. A hasty comparison of copies of both led me to suppose that they might be related, but I am not in a position to offer a definite opinion on the subject.

The neglect of years has, it is understood, in great part destroyed the original paintings at Ajañtá, and, unfortunately, the fine copies in oils, on which Major Gill spent many years, were mostly consumed by the fire at the Crystal Palace in 1860. A few of his copies then escaped, but, I believe, perished in a later fire at South Kensington. Mr. Griffiths, of the Bombay School of Art, has since made a fresh set of copies of a portion of the paintings, and these copies are now exhibited in the Indian Museum at South Kensington. The ordinary visitor, however, can be little impressed by them, in the absence of descriptive labels or catalogue to indicate the history, meaning, or artistic value of the paintings. I should add that, notwithstanding his remarks on the subordinate place given to beauty as compared with realism in the Ajañtá paintings generally, Mr. Griffiths bestows very high praise on particular compositions, and his judgment is supported by the great authority of Mr.

* *Indian Antiquary*, Vol. III, pp. 25-28. So far as I am aware, Mr. Griffiths' report has not been published in full. Considerable extracts from it are given in the *Indian Antiquary*, and in Mr. Burgess' *Notes*.

Fergusson. One of the most remarkable paintings is in the hall of Cave No. XVI, and is supposed to date from the sixth century. The subject is the death of a lady, apparently a princess. The treatment of it has elicited from Mr. Fergusson the comment that "Mr. Griffiths very justly remarks on this picture that 'for pathos and sentiment and the unmistakable way of telling its story this picture, I consider, cannot be surpassed in the history of art. The Florentines could have put better drawing, and the Venetians better colour, but neither could have thrown greater expression into it.' "*

Mr. Fergusson also quotes with approval the criticism of Mr. Griffiths on a painting depicting flying figures in the so-called Zodiac Cave, No. XVII:—

"Whether we look at its purity of outline, or the elegance of the grouping, it is one of the most pleasing of the smaller paintings at Ajanṭā, and more nearly approaches the form of art found in Italy in the thirteenth and fourteenth centuries than any other example there. The easy upward motion of the whole group is rendered in a manner that could not easily be surpassed."†

Whether these panegyrics are overstrained or not I shall not attempt to decide, but I am fully persuaded that no art at all deserving of such praise was ever born on Indian soil.

"India, meditated, brooded, elaborated, but the originating imagination is not found in the dream-life."‡

Whoever seriously undertakes the critical study of the paintings at Ajanṭā and Bāgh will find, I have no doubt, that the artists drew their inspiration from the West, and, I think, he will also find that their style is a local development of the cosmopolitan art of the contemporary Roman Empire.

Section VII. THE ART OF COINAGE IN INDIA.

The opinion expressed by Lenormant that the mechanical process of coining money, properly so called, was unknown to the Indians until they learned it from the Greeks after the invasion of Alexander, was vigorously combated by the late Mr. Thomas on several occasions, and, in my judgment, with success.§

* *Cave Temples of India*, p. 307.

† *Cave Temples of India*, p. 311.

‡ This quotation is taken from a letter of my friend Dr. R. Atkinson, the learned Professor of Sanskrit in the University of Dublin.

§ The question is discursively treated in Mr. Thomas' papers on the Earliest Indian Coinage and on Ancient Indian Weights in the *Numismatic Chronicle* for 1884, and in his revised edition of the latter paper in the first volume of the *International Numismata Orientalia*.

The truth seems to be that, though all ancient Indian coinages with the slightest pretensions to artistic merit are ultimately of Greek origin, yet the idea of coining money, and a knowledge of the simple mechanical processes necessary for the production of rude coins originated independently in India, or, at the least, were not borrowed from the Greeks.

Although I agree with Mr. Thomas and Sir A. Cunningham in rejecting the theory of the Greek descent of all Indian coins without exception, it must be admitted that it would be extremely difficult, if not impossible, to prove that any particular ancient Indian coin now extant is older than the time of Alexander the Great. Sir A. Cunningham has ventured more than once on the bold assertion respecting the so-called 'punch-marked' coins, that "many of them are as old as 1000 B. C., and perhaps even older."*

When it is remembered that no stone building, sculpture, or inscription anywhere in India is known to exist which is older than the reign of Aśoka, some seventy years after the invasion of Alexander the Great, it is clear that a claim on behalf of a coin to an antiquity of 1000 B. C. is very difficult to substantiate. Nothing in India exists, which can be compared with it, that is not seven and a half centuries later in date. The supposition that any Indian coins are to be dated 1000 B. C. is a mere guess, unsupported by a single fact. I cannot venture to name any other date for the beginnings of Indian coinage, for the reason that nothing really is known on the subject. It is possible that certain coins may be very old, but they cannot be proved to be so, and the independent origin of Indian coinage cannot be demonstrated by showing that any given extant piece is older than Alexander. I do not know of the existence of any Indian coin which may not possibly be later than his time.

The really valid reason for denying the Greek origin of the art of coinage in India is that several classes of early Indian coins do not exhibit a single clear trace of Greek influence, whereas they are plainly marked by special Indian characteristics.

The coinage of India in its most primitive form consisted of small, oblong, roughly rectangular plates of silver, without any impression on the surface, but struck to a definite standard of weight, namely, 32 *ratīs*, or 58½ grains. A slight improvement was made when these little plates of silver were stamped with rough devices of stars, trees, and so forth. These devices were impressed by means of small punches, not covering the face of the coin, and sometimes it appears that all the various patterns on the surface of a single piece, were not executed at once, but were impressed successively at different times by the aid of several

* *Archæol. Rep.*, Vol. I, p. 70; II, pp. 229, 264, 288.

punches. Coins of this kind, which were struck both in silver and copper, are, therefore, known to Indian numismatists as 'punch-marked' coins. Like the blanks, which presumably preceded them, they are struck to the Indian standard of 32 *ratis*. This standard cannot, I believe, be in any way connected with the Greek metric system. The punch-marked coins are destitute of legends, but the purely Indian character of their devices and their Indian standard of weight render it incredible that they should be the result of Greek influence.

Other early Indian coins with a general resemblance to the punch-marked pieces were either cast in a mould or struck with a die covering the face of the coin, and some few of the oldest of such cast and die-struck coins, which follow Indian standards of weight, are inscribed with characters of the form current in the days of Aśoka. The devices of these coins are as indigenous as those of the punch-marked class.*

It is, I venture to suggest, by no means unlikely that the use of legends on coins was suggested by Greek example. The earliest inscribed Indian coins are proved by the characters used in their brief legends to belong approximately to the period of Aśoka, whose inscriptions are the earliest examples of the use of the alphabet, afterwards known as Devanāgarī. The history of that alphabet has not yet been satisfactorily traced, and the sudden appearance of long and complicated records inscribed in its characters during the reign of Aśoka is an unexplained mystery. The simultaneous first appearance on Indian soil of stone architecture and stone sculpture in the same reign is another mystery. But, however mysterious be the exact origin of all these sudden innovations, it is tolerably clear that they were in some way the result of the foreign, especially the Greek, influences which certainly affected the policy both of Aśoka and his grandfather. It seems to be a plausible conjecture that the introduction of coin legends about the same time was another effect of the same potent foreign forces.

However this may be, the various kinds of early coins, to which I have alluded above, bear no other mark whatever of foreign origin. It is, therefore, reasonable to conclude that the art of manufacturing

* For discussion of these early Indian coins see the above quoted essays by Mr. Thomas. In Cunningham's *Archæol. Rep.*, Vol. VI, pp. 213-220, Mr. Carilloyle has attempted a classification of the punch-marked coins, the weights of which are discussed by Sir A. Cunningham in *ibid.*, Vol. XIV, p. 16. The classes of early coins found at Eran are discussed and figured in *ibid.*, Vol. X, p. 77, Pl. XXIV. See also *ibid.*, Vol. II, p. 10; V, p. 154, Pl. XXXI, and VI, p. 167. But the numismatic history of India remains to be written. I assume 1·825 grain as the best established value for the *rati*, for the reasons stated in *Journal As. Soc. of Bengal* Vol. LIII, part I, p. 146.

such rude coins was invented in India independently of Greek teaching. But this conclusion does not prove that any such coins should be assigned to a very remote period. It is quite impossible to say when the use of blank or punch-marked rectangular pieces of silver or copper of definite weight began, and it is difficult to say when it ended. I suspect that in out-of-the-way corners of India the old-fashioned punch-marked pieces continued to be struck centuries after coins of more regular fabric had become familiar in the more advanced parts of the country, and that specimens of the ancient, indigenous coinage long continued in circulation side by side with pieces struck in imitation of foreign models. At the present day the people of the districts between Fyzabad and Patna obstinately cling to the custom of using the clumsy, mis-shapen lumps of copper, known as 'dumpy' or 'Gorakhpurî pice,' and refuse to circulate the well-executed, and, to European notions, convenient copper coinage issued from the British mints. During the past year the Government of India has found itself compelled to make an effort to suppress by law the currency of the unauthorized 'dumpy pice.' The mere form, then, of any given punch-marked or other rude uninscribed coin is a very imperfect test of its age.

So far as I can learn, no definite evidence is producible to show that any Indian coin now extant is of earlier date than B. C. 300. The complete absence of all traces of foreign influence on the Indian coins of the most primitive form renders probable the hypothesis that some of them were struck before India entered into at all intimate relations with the peoples of the West, but that is the most that can at present be said in favour of the alleged extreme antiquity of some Indian coins. The arguments of Mr. Thomas, so far as they are based on the references to coins in the Code of Manu and other early Sanskrit books, cannot be regarded as valid, when viewed in the light of modern research into the chronology of Sanskrit literature.

The rare, but now well-known coins of Sophytes, a prince in the Panjâb, who was contemporary with Alexander the Great, are rather earlier than any indigenous Indian coins can be proved to be, and are altogether Greek in device and legend, though perhaps not in weight-standard. They are modelled on the pattern of coins of the Seleucid kings of Syria.*

The extensive mintages of the Græco-Bactrian kings (from B. C. 246 to circa B. C. 25) were mostly issued in countries beyond the limits of India, but long circulated freely in the Panjâb, the valley of the Ganges, and the ports of the western coast.

* Gardner, *Catalogue of Coins of Greek and Scythic kings of Bactria and India*, p. xx.

No known coin can be determined to have been issued by the great Aśoka or any member of his dynasty. The few legends found on coins of the period give no clue to the name of the reigning sovereign. Aśoka must have struck coin to a large extent during his long reign, and, as not a single piece bearing his name has been found, the only possible conclusion is, that the bulk of his coinage consisted of the rude, uninscribed piccos above referred to. These coins were struck, as we have seen, to the Indian standard, and they circulated side by side with the Græco-Bactrian issues, specimens of which are found in large numbers all over Northern India.

The general adaptation in India of Greek or Græco-Roman types of coinage was the result of the Indo-Scythian invasions about the beginning of the Christian era. The indigenous Indian coinage consisted of silver and copper. I cannot undertake to say that gold coins were absolutely unknown in India before the Indo-Scythian invasions, but, if they existed, they were insignificant in quantity, for not a single specimen of them has ever been discovered. The earliest gold coins struck in India, which follow the indigenous scale of weights, are the heavy coins of Chandra Gupta II of the Gupta dynasty, and these are not earlier than A. D. 400. All coins of the Gupta dynasty are die-struck, and their outward form, whether they follow the Indian or the Greek weight-standard, is ultimately derived from Greek originals.*

The Indo-Scythian kings introduced a regular gold currency into India and struck vast quantities of gold coins, as well as of copper. Their gold coins combine various foreign elements, but are essentially Roman *aurei*, equivalent to Greek *staters*. The Gupta coinage is related to the Indo-Scythian, and its devices exhibit faint traces of Greek artistic power as late as A. D. 400. After the break-up of the Gupta empire about A. D. 480, the coinage of India became utterly barbarous, and lost all marks of Hellenic influence on design, legend, or standard.

As regards the origin of coinage in India my opinion, in short, is that the art of coinage in rude forms arose in India quite independently of Greek teaching. Neither the invasion of Alexander the Great, nor the example of his Bactrian successors sufficed to induce the princes of India to abandon their indigenous style of coinage. One petty chief in the Panjáb, Sophytes by name, struck coins after the Greek fashion, but found no imitators in the interior of India. Aśoka and the other sovereigns of the Maurya dynasty continued to issue coins of the old native pattern, on which they did not even inscribe their names.

* For information in detail about the Gupta coinage I must refer to my paper on the Early or Imperial Gupta Dynasty of Northern India in the *Journal of the Royal Asiatic Society* for 1889, pp. 1-158, with five plates.

The general (though not universal) adaptation of Greek numismatic forms copied from Roman coins was the work of the Indo-Scythian dynasties, whose rule in the Panjáb began a little before the Christian era, and spread over all Northern India during the three following centuries. The introduction of coins of Greek type was synchronous with the development of an extensive gold currency, which partly replaced, and partly supplemented the existing issues in other metals.

The Gupta coinage A. D. 350 to 480 is a development of the Indo-Scythian.

From the fall of the Gupta empire to the establishment of the Muhammadan power all Indian coinages are barbarous and chaotic, and completely destitute of artistic merit.*

The die-cutters of India never attained any high degree of excellence in their art. Those of Bactria, as distinguished from India, produced coins, not, indeed, approaching in beauty those of Syraene, but possessing characteristics which entitle them to respectful consideration as works of art.

Professor Gardner observes;—"In the types used by Greek kings we find great variety, and they open to us quite a new chapter of Greek art, affording fresh proof of the remarkable originality of the artists of the Hellenistic age.

"In regard to the style we may note two points: (1). The extraordinary realism of their portraiture. The portraits of Demetrius (pl. II, 9), of Antimachus, (V, 1), and of Eueratides, (V, 7), are among the most remarkable which have come down to us from antiquity, and the effect of them is heightened in each case by the introduction of a peculiar and strongly characteristic head-dress, which is rendered with scrupulous exactness of detail.

"(2). The decidedly Praxitelean character of the full length on the reverses. The figures of Herakles (pl. II, 9; III, 3), of Zeus (IV, 4; VII, 2), of Poseidon, (V, 1), of Apollo (V, 4; IX, 10), are all in their attitudes characteristic of the school of Praxiteles."†

Some of the Bactrian coins were struck within the limits of the territories now known as India, but most of them were minted beyond the border, and the Bactrian coinage, as a whole, is foreign to India.

* My remarks must be understood as applying only to Northern India in the widest sense. The system of coinage in Southern India has always been quite distinct, and I do not profess to have studied its history. The Peninsula was never brought into really close political relations with Northern India until the establishment of the British supremacy. Even Aurangzib's protracted campaigns did little to bridge over the gulf between the two regions.

† *Catalogue of Coins of Greek and Scythic kings of Bactria and India*, p. lviii.

I do not propose to discuss its relations with the general course of Greek art, and refer to its peculiarities only to enquire how far they affected the art of coinage in India.

The realistic portraits executed by the Bactrian artists were beyond the powers of the Indian die-cutters. The Indo-Scythian coins, except the very latest, are well executed pieces of metal work, but, without exception, almost totally wanting in artistic merit. The effigies of the kings are conventional, and the whole design is stiff and formal. Some of the Gupta coins display more freedom and originality in design, but not a single example of a recognizable portrait can be found, I believe, either in the Indo-Scythian or Gupta series.

The influence of the second peculiarity of the Bactrian coinage noted by Professor Gardner can be discerned in the Gupta series, though not, I think, in the Indo-Scythian. The peculiar attitude of the standing statues of the school of Praxiteles consists in this that the weight of the body is thrown on one leg, the figure being inclined to one side, and bent in a graceful curve so that the hip on the other side is arched outwards. This peculiarity, which in the hands of a good Greek artist, added grace to the representation of the human form, was imitated by the Græco-Bactrian mint masters with considerable success. It caught the Indian taste, but, in the hands of clumsy imitators, was converted into a hideous deformity. An inartistic exaggeration of the Praxitelean attitude is characteristic of many of the Gupta coins of the fifth century, and of much Indian sculpture from an early date until the present day.

Unhappily the history of Indian art, is, as observed by Mr. Ferguson, a history of decay, and the criticism, passed by Sir A. Cunningham on Indian sculpture, applies, *mutatis mutandis*, to other arts:—

“It is a fact, which receives fresh proofs every day, that the art of sculpture, or certainly of good sculpture, appeared suddenly in India at the very time that the Greeks were masters of the Kábul valley, that it retained its superiority during the Greek and half-Greek rule of the Indo-Scythians, and that it deteriorated more and more the further it receded from the Greek age, until the degradation culminated in the wooden inanities and bestial obscenities of the Brahmanical temples.”*

The employment of fairly well-executed Greek legends on the coins of the Indo-Scythian kings of the first two centuries of our era proves that the epithet ‘half-Greek’ applied to their rule by Sir A. Cunningham is not unsuitable. Kanishka and his successors would not have impressed Greek legends on their coins, unless the Greek language had considerable currency among their subjects. I do not, of course, mean

* *Archæol. Rep.*, Vol. III, p. 100.

to suggest that Greek was ever commonly spoken or read in India, but it must certainly have been understood by many of the court officials. The language in the time of Kanishka and Huvishka probably occupied a position similar to that of the English language in India forty or fifty years ago, previous to the development of the existing system of public instruction.

The knowledge of Greek seems to have lingered longest in Gujarât. Corrupt Greek letters are found on the silver coins of Skanda Gupta struck in that region as late as A. D. 450, and they also occur on similar coins of his father and grandfather. The letters on these coins are unmistakably Greek in form, but meaningless, and are evidently imitations of legends, which were once significant, executed by men unable to read Greek. It is plain, therefore, that even on the western coast, where the agency of maritime commerce had for centuries maintained an active intercourse with the Hellenistic world, all knowledge of the Greek language had died out by A. D. 400. In Northern India such knowledge seems to have been lost two centuries earlier.

It is curious that not a single Greek inscription, other than coin-legends, has yet been discovered either in India or in Afghanistan.

The numismatic facts, to which I have briefly referred, help to render credible and intelligible the alleged Greek influence on Indian literature, science, and philosophy, to the consideration of which I shall now devote a few pages.

Section VIII. THE ORIGIN OF THE INDIAN DRAMA.

The existence of a considerable ancient dramatic literature in the Sanskrit language was made known to European readers at the close of the last century by Sir William Jones' translation of *Sakuntalâ*, a charming pastoral play, which is, perhaps, the only Sanskrit work that has taken a place among the literary classics of the world.

Since Sir William Jones' time the Sanskrit plays have attracted many students and translators, notably Horace Hayman Wilson, whose well-known work, *Specimens of the Theatre of the Hindus*, is still the leading authority on the subject.

The question of the origin and affinities of the ancient Indian drama has excited the curiosity of scholars, from the time of its discovery until the present day, and various attempts have been made to solve the problem.

The circumstance that the Sanskrit name for a dramatic composition is derived from a root which conveys the idea of dancing naturally suggested the theory, which readily found favour, that "the Indian drama arose, after the manner of our modern drama in the Middle Ages,

out of religious solemnities and spectacles (so-called 'mysteries'), and also that dancing originally subserved religious purposes."*

But this plausible theory has, unfortunately, very little historical basis, and a rival theory that the dramatic literature of India is a direct descendant of the epic seems not to rest on any more solid foundation.†

It is not improbable that rude pantomimic representations of the incidents of sacred stories, resembling the modern Rāmlīlā, may have been as popular in ancient times as they are now, but even if they were, they could hardly be regarded as the parent of the Indian drama. Such exhibitions in their modern form, of which alone anything is known, remain unchanged from year to year, and appear quite incapable of literary development. Their ancient predecessors, if any existed, cannot be credited with any greater power of generating literature. The Sanskrit drama includes pastorals, elaborate comedies of real life, complex pictures of political intrigue, and other varieties of highly artificial composition. The gap between such compositions and a clumsy 'mystery' like the Rāmlīlā is vast and unbridged, and the interval between them and displays of sacred dancing or formal recitations of epic episodes is equally wide.

The Indian drama, as Professor Weber remarks, "meets us in an already finished form, and with its best productions." Whence came this finished form; was the ripe fruit not preceded by seed or flower?

It is impossible to believe that the "finished form" sprang, Minerva like, from the head of Kālidāsa. The dramatic literature of India, like all other ripe productions of art in all countries and ages, must be either the result of an independent, and therefore slow, process of evolution worked out on native soil, or be the more sudden effect of the fertilization of an indigenous germ by a potent foreign influence.

The latter solution of the problem, is, I have no doubt, the true one. It is not easy to disentangle the life history of the indigenous germ, concerning the true affinities of which opinions may well differ,‡

* Weber, *History of Indian Literature*. (Trübner), p. 197. This theory is well expressed in the brilliant article on Sanskrit Poetry and the Hindu Drama by Dean Milman, which appeared in the *Quarterly Review* for 1831. Dean Milman considered that the Indian plays more closely resembled the Spanish than those of any other European country.

† Brockhaus, who denies all Greek influence on the Indian drama, maintains the epic theory. I have not seen his writings.

‡ Windisch himself (p. 6) admits that the Epics contain a dramatic element, and that the Indian drama was indebted to some extent, as the Greek also was, to the epos for help. He is of opinion (p. 8) that dramatic representations, based on epic stories, existed in India before foreign influences were felt, such representations being simply due to the natural desire to see, as well as hear, the stories. This

but the vivifying foreign influence can be isolated, and subjected to microscopic investigation.

That foreign influence which gave India her noble dramatic literature is the same which bestowed upon her the arts of the painter, sculptor, and engraver—the undying spirit of Hellas. India received this, her spiritual guest, but for a little while and grudgingly. When he took wing and fled to more congenial dwelling places the arts soon followed in his train.

Professor Weber was the first to suggest that the representation of Greek dramas at the courts of the Hellenistic kings in Bactria, the Panjáb, and Gujarát awakened the Hindú faculty of imitation, and thus led to the birth of the Indian drama; but the suggestion was qualified, and almost negatived, by the remarks appended to it that the hypothesis does not admit of direct verification, and that no internal connection between the Greek and Indian dramatic literature can be proved.

The Danish scholar, E. Brandes, accepted the hypothesis thus doubtfully propounded, and, rejecting the limitations imposed by its author, boldly undertook to prove the reality of an internal connection between the ancient Indian plays and the New Attic Comedy, as chiefly preserved in the Roman adaptations by Plautus and Terence. I have not seen Dr. Brandes' treatise, nor could I read it if I had, but, fortunately for that large class of persons who are ignorant of Danish, substantially the same thesis has been ably argued by Dr. Windisch in a language more generally intelligible.*

It would be impossible to do full justice to Dr. Windisch's argument otherwise than by a complete translation of his essay. I shall merely attempt to indicate in general terms the nature of some of the leading proofs on which he relies in support of the proposition that the Sanskrit drama is of Græco-Roman parentage.

The general probabilities in favour of the theory that the Indian plays are derivatives of the New Attic Comedy of the school of Menander rest chiefly on the evidence which proves an active and long-continued intercourse between the east and west. Some of this evidence has already been considered (*ante*, p. 157). A special agency for the diffusion of knowledge of the forms of Greek drama among Oriental popu-

opinion seems to be pure conjecture, and is not shared by my learned friend Professor Atkinson. Windisch also holds (p. 10) that epic recitation, and not a lyrical performance associated with music and dancing, was the germ of the Indian drama.

* *Der Griechische Einfluss im Indischen Drama*. Von Ernst Windisch. Aus den Abhandlungen des Berliner Orientalisten-Congresses. 8vo, pp. 106. Berlin, A. Asher and Co., Weidmannsche Buchhandlung, 1882.

lations was furnished by the travelling companies of players, who are known to have traversed the Hellenistic kingdoms; and the poets, as well as the players, were not averse to travelling. Menander and Philemon were both invited to the court of Ptolemy Soter.

Greek ideas entered India chiefly by two routes, one overland through Palmyra and Bactria, the other maritime through Alexandria and the ports of the western coast, especially Barygaza, the modern Bharoch. We know from the anonymous Periplus of the Erythrean Sea, which was written between A. D. 80 and 89,* that a very active commerce was then carried on between Barygaza and the inland city Ozéné (the modern Ujjain in Siudia's territory), where Aśoka had once been Viceroy, and which, in the time of the author of the Periplus, was the great depôt of the foreign trade.

The scene of the 'Toy-Cart,' the most ancient Indian drama extant, is laid at Ujjain, and several considerations lead Dr. Windisch to conclude that the Indian drama was first developed at that city, as a direct consequence of intercourse with Alexandria. The few known facts in the history of the Bactrian king Menander, who flourished about B. C. 110,† indicate that the overland communication between India and the West must have been briskly maintained in his time. The importance of Palmyra as a commercial depôt (*ante*, p. 157) was of later date. Before the Christian era the Western communications of India were with the Hellenized kingdoms of Asia and Egypt. In the first century after the Christian era they were extended to Rome and the Roman provinces. It is, in my opinion, not at all unlikely that the New Attic Comedy was known to learned men in India through the Latin adaptations of Plautus and Terence as well as in the original Greek.

Whether it be admitted or not that the Indian drama is of foreign origin, no one, I suppose, will venture to deny that ample opportunities existed during several centuries for the importation of all sorts of Greek ideas, dramatic or other.

In the opinion of Dr. Windisch the cumulative effect of the evidence of resemblance in particular points between the Indian and Græco-Roman dramas is so great that "we must recognize either a wonderful case of pre-established harmony, or the existence of Greek influence on the Indian drama." The dilemma appears to me to be expressed with perfect accuracy, and I am fully convinced of the reality of the Greek

* The proof is given in the Introduction to McCrindle's translation.

† This is the date adopted by Professor Gardner in his Catalogue of Coins of the Greek and Scythic kings of Bactria and India.

influence on the Sanskrit drama, and further, that without that influence the dramatic literature of India would never have come into existence.

The formal structure of the Sanskrit dramas closely resembles that with which we are familiar in Plautus and Terence. Like the Græco-Roman, the Indian plays are divided into acts and scenes, and each piece is preceded by a prologue. The mere fact of the existence of the prologue in the Indian, as in the European plays, is in itself surprising, and can hardly be regarded as a merely casual coincidence. The improbability that it is such becomes much greater when we observe that in both cases the prologue is devoted to the same purposes, the announcement of the names of the poet and the play, the gaining favour of the spectators, and the preparation of their minds for the piece itself.

Again, it cannot well be the result of accident that the love-story of the Indian drama is in plot, development, and *dénouement* essentially of the same kind as that of Græco-Roman comedy. The plot of the 'Toy-cart,' the most ancient Indian play extant, may be accurately described in the words applied by Rost to the *Curculio* of Plautus:—"The subject of this comedy is very simple, and depends, as usual, on a secret intrigue, the lover's want of money, and the supplanting of a rival."

The fair *Perditas* of Plautus and Terence, who eventually prove to be high-born daughters of Athenian citizens, find their parallel in the maid-servants of the Indian plays (*Mālavikāgnimitra* and *Ratnāvalī*), who turn out to be princesses in disguise; and the *ἀναγνωρισμός*, or recognition of the disguised young lady, which is a critical incident in nearly every Græco-Roman play, is repeated, merely with variations of detail, in the Indian adaptations.

Other stock characters of the Terentian comedy have also been imported into the Sanskrit drama.

The *parasitus edax*, the *niles gloriosus*, and the *servus currens*, so familiar to all readers of the Græco-Roman comedies, are reproduced respectively as the *viṭa*, *śakāra*, and *vīlīshaka* of the earliest Indian drama. The external origin of these strongly marked characters, is clearly indicated by the facts that the three personages are found together only in the 'Toy-cart,' the oldest drama, which was composed while India was still in communication with the Hellenistic world, and that all three were discarded by Bhavabhūti, who lived about A. D. 700, when Greek influence had ceased to directly affect India. Dr. Windisch's detailed analysis of these characters is very interesting, but is too long for reproduction.

One striking argument, however, must not be omitted. The Sans-

krit author Bharata, who wrote a technical treatise (*nāṭyaśāstra*) on dramatic art, lays down the rule that the players should be five in number, namely, the *sūtradhāra*, his assistant, the *pāripāśvaka*, the *viṣa*, *śakāra*, and *vidūshaka*. This enumeration, Dr. Windisch points out, is equivalent to a list of the regular male personnel of a Græco-Roman play, but does not apply to any extant Indian play, except in so far that all the five personages named appear in the 'Toy-cart,' in which alone the *śakāra* is found. The *viṣa* is met with in only one other piece (*Nāgānanta*). It is therefore difficult to understand why Bharata should have laid down this rule, unless pieces were extant in his time which conformed to it, and these pieces must have resembled the Greek models at least as closely as the 'Toy-cart' does.

The repulsive character of the *lena*, or *μαστροπός*, the go-between and corrupter of maiden virtue, is faithfully reproduced in the character of the mother of Vasantasenā in the 'Toy-cart,' and the elevation of Vasantasenā herself to a respectable position by the force of unselfish love may be compared with the story of Silenium in the *Cistellaria* of Plautus. The very name of the 'Toy-cart' (*mṛichchhakatikā*) recalls the names of Plautine plays such as *Anulularia* and *Cistellaria*.

The essay by Dr. Windisch, from which I have quoted, does not exhaust all the arguments which might be adduced in support of his thesis, and the partial analysis of his reasoning given above is far from presenting the case, as stated by him, in its full force. Yet, even what has been advanced in the foregoing pages should, I venture to think, suffice to shake the faith of those who believe in the indigenous origin of the Sanskrit drama, and to prove that strong reasons exist for holding the opinion that India is indebted for the existence of the most generally attractive department in the vast circle of her literature to contact with the artistic Hellenic mind.

It is, perhaps, necessary to observe that no one contends that any extant Indian play is a translation or free adaptation of a given Greek piece. That certainly is not the case. The best Indian plays are the work of native genius of high order, employing native materials in its own way, and for its own ends, but first set in motion by a powerful impulse received from abroad. The case of the drama is analogous to that of the Amarāvati sculptures. I agree with Mr. Fergusson in thinking that those sculptures would never have come into existence, if the latent powers of Indian artists had not been aroused and stimulated by the example and teaching of Greek, or at least of Hellenistic, sculptors, but no one would maintain that the carvings now on the staircase of the British Museum should be classed among the remains of Greek art. They are thoroughly Indian in subject and style, and skilled criticism

is needed to discern the hidden foreign element. So it is with the drama. The plays are Indian, but the idea of composing such plays is Greek.

The case of the sculptures of the Gándhára or Pesháwar school, which I have discussed at such length, is on the contrary, analogous rather to an Indian free translation or adaptation of a Greek play. Those sculptures are close imitations of the contemporary, especially the Christian, art of the Roman empire in the third and fourth centuries, and this fact lies on the surface, visible to any commonly attentive observer. The Roman or Christian subjects have been made to serve Buddhist purposes, but have been transferred bodily to India with little change, save that of name.

Section IX. GRÆCO-ROMAN INFLUENCE ON THE RELIGION, MYTHOLOGY, SCIENCE, AND PHILOSOPHY OF INDIA. CONCLUSION.

A smile will, I fear, pass over the gentle reader's countenance when he compares the promise of the title with the performance of the few pages of this section of my essay. A discussion, in any degree adequate, of the topics mentioned in the heading would require the ample room of an octavo to itself, the writer of which should be equipped with a store of varied knowledge to the possession of which I can make no pretension. So far as I am aware, no one has yet attempted such a survey of the religion, mythology, science, and philosophy of India as would give a general view of the boundaries which divide the indigenous components from the foreign. A slight, rough sketch of a survey of the kind will be found in Weber's *History of Indian Literature*, but a map drawn in more distinct colours is much wanted. I cannot attempt to draw it. The preceding pages will, perhaps, have succeeded in convincing at least some readers that the best elements in the plastic, pictorial, numismatic, and dramatic arts of ancient India are of foreign, chiefly Græco-Roman, origin. In these concluding pages I merely wish to point out that the foreign influence was not confined to those fields, where I have traced its workings in some detail, but extended also to other regions of thought. I am not prepared to follow in detail its operations within those regions, nor to catalogue the instances where its presence may be discerned, and can only offer some unsystematic observations.

The Indo-Scythian coin series affords obvious and conclusive evidence that about the beginning of the Christian era the religions of India and those of the neighbouring countries to the west were acting and re-acting upon each other.

The worship of Siva was certainly then established among

other cults, in India, and the figure of the god, armed with his trident, and standing beside his sacred bull, is, perhaps, the commonest mythological device of the Indo-Seythian coins. But he is not exactly the Siva of the mediæval Purānas, a Hinduized aboriginal demon. Sometimes he is hardly to be distinguished from the Greek Poseidon, and the Greek writers on India themselves perceived that he was akin to Dionysus. Dr. Windisch shows that all the Sanskrit plays are associated with the worship either of Siva or his consort Gauri, and that they were generally performed, like the Greek dramas, at the spring festival. It seems probable that the Hellenistic settlers in India transferred to Siva some of the honour due to Dionysus, and the idea of the Indian deity must have been influenced by the Greek conception of those gods in the Olympie pantheon who most nearly resembled him.

Some rare coins of the great Indo-Seythian emperor, Kanishka, bear the name of Buddha, ΒΟΥΔΟ in Greek characters, and afford us the earliest known examples of the conventional effigy of the teacher.

Other Indo-Seythian coins, again, present figures of the personified Sun and Moon, as Greek deities, with their Greek names Helios and Seléne, while many others represent a pantheon of Iranian deities, bearing such strange names as Oksho (Okro), Ardethro, and so forth, the meaning of which is only now beginning to be understood. I cannot here pursue this topic further, and only allude to it for the purpose of indicating that both a little before, and a little after, the Christian era Hellenic and Asiatic forms of religion were interacting, and that both Buddhism and Hinduism must have been modified by the contact with other modes of religious belief.

Even so late as A. D. 400 the devices of the Gupta coins show that the conceptions of Hindú divinities were partly based on Græco-Roman ideas. Lakshmi, the goddess of plenty and good fortune, is invested with attributes plainly borrowed from the *ἄρχη*, Abundantia, and other personifications of abstract ideas current in the west. The conception of Lakshmi, the consort of Vishnu, glides imperceptibly into that of Párvatí, Durgá, or Gaurí, the consort of Siva, and is related to some of the forms both of Venus and Cybelé.*

The apparent resemblances between the Puranic legend of Krishna and the Gospel accounts of Christ are well known, and have formed the subject of much discussion. I am inclined to believe that the Krishna myth is really indebted to the Gospels for some of its incidents.

* For the Indo-Seythian coins see Gardner's Catalogue, and articles by Stein, Cunningham, West, and Rapson in the *Babylonian and Oriental Record* for 1888 and 1889, and *Indian Antiquary* for April 1888. For the Gupta coinage see *Journal R. As. Soc.* for 1889, p. 25, etc.

In the early centuries of the Christian era the religion of Christ in one or other of its forms extended over many parts of Asia where it is now extinct, and it *must* have modified the ideas and beliefs of the peoples among whom it flourished. The Gnostic variety or corruption of Christianity was especially popular in the East, and strong reasons exist for believing in Gnostic influence on the Vedantist philosophy of India. The Bhagavad-Gítá certainly seems to have much in common with the Gospels.*

The extraordinarily close resemblance between many of the sculptures of the Gándhára or Pesháwar school, and the monuments of early Christian art at Rome, which was first observed by Mr. Fergusson, has been discussed at some length in an earlier section of this paper (*ante*, p. 164). The resemblance is certainly real, and, however it may be explained, proves with equal certainty that the Christian and the Buddhist artists had many ideas in common. The Buddhism of Gándhára beyond doubt borrowed Christian forms of artistic expression; it would be strange if the Buddhist teachers did not assimilate, along with the forms, some Christian doctrine. But any attempt to follow this speculation further would carry me beyond my depth.

The Gándhára adaptation of Loochares' group representing the Rape of Ganymede (*ante*, p. 133) shows clearly how easy it was for the ancient Indians to adopt a Greek myth, and convert it to the use of their own religions.

Weber maintains that a substratum of Homeric legend underlies the Rámáyana, and gives good reasons for his opinion. The mere fact that such a suggestion can be supported by plausible arguments indicates that the student of comparative mythology must be careful not to assume the Indian origin of every myth which may have on the surface a purely Indian appearance.

I have shown above (*ante*, p. 133) that the Asuras of Puránic mythology are probably Hinduized adaptations of the Greek giants, who warred with the gods.

The remarkable fact that no images of Buddha are found among sculptures at Bhárhut (B. C. 150), and Sánchi (A. D. 80), while they are numerous at Amarávatí (A. D. 180),† suggested to Mr. Fergusson

* See the translation of Dr. Lorimer's 'Appendix to the Bhagavad-Gítá' in *Indian Antiquary*, Vol. II, p. 283. That author quotes St. Chrysostom, who died A. D. 407, to prove that a translation of the New Testament into some Indian language existed in his time.

† This is the approximate date of the outer rail. The inner rail is later, and some sculptures date from before the Christian era. The remains at Amarávatí illustrate the period from about B. C. 100 to A. D. 250 (Burgess, *Buddhist stupas of Amarávatí and Jaggayapetá*, p. 112).

the bold speculation that the multiform idolatry of modern India is due to contact with the image-worshipping Greeks. Mr. Fergusson thus expresses this daring hypothesis in his latest work :—

“ I suspect that when the matter comes to be carefully investigated, it will be found that the Indians borrowed from the Greeks some things far more important than stone architecture or chronological eras. It is nearly certain that the Indians were not idolators before they first came in contact with the Western nations. The Vedas make no mention of images, nor, so far as I can learn, [do] any of the ancient scriptures of the Hindus.

“ Buddhism is absolutely free from any taint of idolatry till after the Christian era. So far as we can at present see, it was in the Buddhist monasteries of the Gándhára country, where the influence of Græco-Bactrian art is so manifestly displayed, that the disease broke out, which was afterwards so completely to transform and pervade the outward forms, at least, of all the ancient religions throughout India.”*

The propositions thus stated with Mr. Fergusson's customary directness cannot be implicitly accepted, although they embody a considerable amount of truth. It is not safe to affirm that Buddhism before the Christian era was absolutely free from idolatry, for the Taxilan Buddhist temples, adorned with plaster images, were probably erected at the close of the first century B. C. and we do not know, though we may reasonably suspect, that the images are of later date. Statues found at Mathurá, and certain coins of Kanishka (*circa* A. D. 78 to 110) prove conclusively that images of the teaching Buddha in his conventional attitudes, both seated and standing, were well known at the close of the first century A. D.† It is rash to affirm that they were unknown a hundred years earlier. A colossal statue of the standing Buddha discovered by Sir A. Cunningham at Srávastí (Sáhet-Máhet) in Oudh seems to be slightly older than the Mathurá images.‡

It is, however, quite true that in Bihár, Central and Western India, no image of Buddha earlier than the Christian era, or perhaps than A. D. 150, is known, and Mr. Fergusson appears to have been right in holding that the worship of images of the founder of Buddhism was introduced from the North West; and it is probable that the development of sculpture, which was undoubtedly stimulated by Hellenic influence, gave encouragement to idolatrous practices.

Among all the departments of Sanskrit literature the elaborate

* *Archæology in India* (London, Trübner and Co., 1884).

† Cunningham, *Archæol. Reports*, Vol. V, p. vii; and Gardner's *Catalogue*, pp. 130, 175.

‡ Cunningham, *Archæol. Rep.*, *ut supra*, and Vol. I, p. 339.

system of Hindú logic, and the marvellous, almost miraculous, structure of grammar erected by Pápiní and his successors have the greatest appearance of absolute originality. Yet some competent scholars are disposed to seek a western origin even for these. The true position of the Sanskrit logicians and grammarians in relation to the teachers of other countries cannot be satisfactorily determined until the main outlines of the chronology of Sanskrit literature are settled definitely within narrow limits of possible error. The radius of error is gradually being reduced, but a long time must elapse before it is brought within an approximation of zero.

In one branch of Indian science the operation of direct and potent Greek influence, however it may once have been doubted, has been fully demonstrated, and is now admitted by all writers competent to form an opinion on the subject. Indian astronomy, in its exacter form, as taught in the Sanskrit text-books is essentially the astronomy of the Alexandrian schools, and its technical nomenclature is to a large extent Greek in a slight disguise. An earlier, inexact astronomy, probably of Babylonian origin, had been known in India long before the works of Alexandrian professors reached her shores, but all Indian astronomy with any claim to scientific precision is Greek. This scientific astronomy was taught by Áryabhaṭá in A. D. 500, and by Varáha Mihira about half a century later, but it was probably known to some persons in India at a considerable earlier date.*

It is obvious that highly abstruse and technical works like the treatises of the Alexandrian astronomers could not have been mastered by the Indian astronomers except by textual study at a time when the Greek language was still intelligible to learned men in India. The extensive importation of Greek technical terms into the vocabulary of Hindú astronomy shows that the Greek works themselves must have been read in India, and also proves that the ideas expressed by those terms were unfamiliar to the native scholars. If the ideas had been familiar, Sanskrit words to express them would have existed, and, if such words had existed, they would have been used, and the foreign terms would not have been imported. The necessity under which the Hindú astronomers lay of borrowing Greek scientific terms by the score

* Pandit Shankar Balkrishna Dikshit observes that there are two distinct and separate astronomical works, each bearing the name of Áryabhaṭá as its author. The first (to which reference is made in the text), known as *Áryabhaṭíyá*, or *Árya Siddhánta*, bears the date S'aka-samvat 421 expired, = A. D. 499-500. It has been published by Dr. Kern. The second work, known as the *Laghu-Árya-Siddhánta*, was composed at some time between A. D. 628 and 1150, and appears never to have been printed. These two distinct works are said to have been sometimes confounded by European writers. (*Indian Antiquary*, Vol. XVII (Nov. 1888), p. 312.)

is very strong evidence that their native astronomy was, from the purely scientific point of view, extremely imperfect.

The knowledge of actual Greek books displayed by the Indian astronomers also shows that there is no improbability in supposing that a limited class of readers in India had studied the texts of Greek plays. Dr. Windisch is content to believe that the Greek elements in the Sanskrit drama, the existence of which he demonstrates, were assimilated by the Indian authors through the agency of performances of Greek plays on the stage. It is not necessary, he says, to assume that the texts were known in India. It seems to me impossible that the resemblances between the Greek and Indian dramas should have been brought about in this casual way. It would be nearly as easy to believe that Aryabhaṭa learned the signs of the zodiac and the term 'diameter' from chatting with ship-captains on the quays of Barygaza. I can see no reason whatever to feel sceptical about the reality of the diffusion to a limited extent of Greek books in Greek among the learned classes of India during the early centuries of our era.

The coins and the manuals of astronomy are incontrovertible evidence that some people there could read Greek, and why it should be supposed incredible that Kālidāsa could read the plays of Menander I cannot imagine.

We are not bound to accept as literal statements of fact the rhetorically expressed assertions of Plutarch and Dio Chrysostom that the Indians sang the poems of Homer, and that the children of the Gedrosians recited the tragedies of Euripides and Sophocles, and may yet feel full assurance that Indian scholars who studied and assimilated Alexandrian manuals of astronomy cannot have been altogether unacquainted with the classic literature of Greece.

I have now reached the bounds to which a general survey of the action of Hellenic influence on ancient India can be conveniently extended at present. The adequate discussion of the Gāndhāra sculptures alone would fill a goodly volume. The imperfect account of them given above is only intended to stimulate curiosity, and to indicate the directions in which more exhaustive investigation will reward the student.

I do not desire to exaggerate the intrinsic merit of these sculptures, though I feel assured that it is amply sufficient to justify their critical study, and that, even if it were much less than it is, the historical interest attaching to the productions of a school which links together Hellenic and Indian art gives them a right to claim the attention both of Orientalists and of classical scholars.

The discovery of the linguistic and literary treasures of Sanskrit so charmed the imagination of the earlier Orientalists that they lent

a ready ear to the extravagant tales of the pandits, and were willing to attribute the most venerable antiquity and almost absolute originality to the strange civilization and vast literature suddenly brought within their ken.

Modern historical and literary criticism has been steadily engaged in the task of exposing the falsity of Brahmanical tradition or pseudo-tradition, the "lying gabble of Bráhmans," as it has been well called, and of moving up, so to speak, all dates in the early history of India. Pápiní, the grammarian, Manu, the lawgiver, Kálidása, the poet and dramatist, and many other names famed in Indian story, have already been moved up from remote prehistoric, or pre-Christian, times to post-Alexandrian, or post-Christian, dates.*

This process still continues, and simultaneously with the demonstration of the comparatively modern date of all Sanskrit, other than Vedic, literature, the conviction has forced itself upon scholars that the civilization of ancient India was not so indigenous and self-contained as, at first sight, it seemed to be.

India may, apparently, claim with justice to have given birth independently to the mechanical process of coinage, but her weakly numismatic child never attained maturity, and was soon compelled to make way for a stranger of more vigorous growth. The other products of civilization claimed from time to time as independent Indian discoveries are now either proved to be foreign importations, or shown to be, at the best, of doubtful parentage.

I do not know any historical problem more startling at first sight than that propounded by the sudden and simultaneous first appearance in India during the third century B. C. of long documents in two diverse highly developed alphabets, of stone architecture, stone sculpture, chronological eras, inscribed coins, and a missionary state religion.

The problem has not yet been completely solved, and perhaps never can be, but it is certain that the phenomena referred to were largely due to a rapid development of intercourse between India and Western nations in the time of the Mauryan dynasty of Chandra Gupta and Aśoka (B. C. 315 to 222). A further development, or renewal, of that intercourse in the first century before, and the four centuries following, the Christian era, conducted through Bactrian, Alexandrian, and Palmyrene channels, produced new schools of architectural, plastic, and pictorial art, introduced novel types and standards of coinage, taught science in its exacter forms, and gave birth to a dramatic literature of great variety and merit.

* For a convenient summary of much of the recent discussion on the chronology of Indian Literature, see Max Müller's "India, What can it Teach Us?"

The same occidental influences left enduring marks on the religion and mythology of India, modified her epic poetry, and in the opinion of some competent judges, affected even the grammar, logic, and philosophy which are the most characteristic and original products of Indian thought.

The investigation of the relations between the early civilization of India and that of Western nations is still very incomplete, but it has proceeded sufficiently far to warrant the belief that further research will magnify rather than diminish the debt due by India to Assyria, Babylonia, Persia, Greece, and Rome.

ADDENDUM.

When compiling the Bibliographical List (*ante*, page 113) I omitted to notice the following papers:—

(1.) Indo-Grecian Sculptures from the N.-W. Frontier, by Major J. Abbott (with a Plate). *Proc. As. Soc. of Bengal for 1854*, page 394.

This communication briefly notices a large box of sculptures presented to the Society which were “dug from the site of a temple on the left bank of the Indus, called Kala, close below Ghazi Huzara. The winged female is from another old site at present called Shah ke Tere in Quatur. They are very inferior in grace and execution to those from Trans-Indus..... Those at Kala seem to have belonged to a Buddhist temple of small size, but very richly and elaborately sculptured, the material being black clay-slate.” The plate represents a head from Rāwalpindi.

(2.) Note on a small Indo-Greek Sculpture, by the same, *ibid.*, for 1858, page 261. The figure described and presented to the Society is one of the Atlantean class, purchased from a native, who had found it in an old fort of the Yūsufzai at the foot of the mountains.

(3.) Account of some of the Sculptures in the Peshāwar Museum, by Rev. W. Loewenthal, *ibid.* for 1861, page 411.

The account given is, unfortunately, extremely meagre. It mentions Buddhas almost innumerable, kings of various sizes, a lady sitting on a lion, playing the lute, reliefs, and elaborate figures of warriors in

all kinds of dresses, sometimes purely Greek, sometimes purely Oriental, sometimes a mixture of the two.

The only work described in detail is the panel with the three Greek soldiers below, and grotesque figures above, which has been noticed in the text (*Section III, page 135*) Mr. Loewenthal states that this slab was "lately brought from Nagram in Yúsufzai by Lieut. Short." He observes that "some pieces of pottery have also been found in the cantonment [*scil.* Pesháwar], stamped with figures of pure Greek designs." I have not seen any such pottery.